

AGRUTex® Environmental Applications

NONWOVEN GEOTEXTILES

At AGRU, our core competency is servicing the waste containment industry, and that is why our nonwoven geotextile product line is centric to this industries applications. Our geotextiles are superior in performance for the following applications: geomembrane liner protection, subsurface drainage systems, leachate collection systems, and gas/ collection venting systems.

Our capabilities are not limited to our standard product line, and we specialize in made to order products with customized properties designed to meet project specific requirements. Please contact us for solutions available from AGRU.

AGRUTex® geotextiles are a series of polypropylene, staple fiber, needle punched nonwoven products. Staple fibers are needled together to form a stable network that retains dimensional stability relative to each other. The geotextiles are resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

AGRUTex standard products conform to the property values listed below.¹

Property Style Name	Test Method	Frequency	Minimum Average Roll Values					
			AT041	AT061	AT081	AT101	AT121	AT161
Physical								
Mass/Unit Area, oz/yd ² (g/m ²)	ASTM D-5261	100,000 SF	4 (136)	6 (203)	8 (271)	10 (339)	12 (407)	16 (544)
Mechanical								
Grab Tensile, lbs (N)	ASTM D-4632	100,000 SF	120 (534)	170 (757)	220 (979)	270 (1200)	320 (1424)	390 (1736)
Elongation, %	ASTM D-4632	100,000 SF	50	50	50	50	50	50
CBR Puncture, lbs (kN)	ASTM D-6241	500,000 SF	335 (1.5)	435 (1.9)	600 (2.7)	725 (3.2)	925 (4.1)	1125 (5.0)
Trapezoidal Tear, lbs (N)	ASTM D-4533	100,000 SF	50 (223)	65 (289)	95 (423)	105 (467)	125 (556)	150 (668)
Endurance								
UV Resistance % Strength Retained after 500 hrs	ASTM D-4355	Per Formulation	70	70	70	70	70	70
Hydraulic²								
Apparent Opening Size ³ , US Sieve (mm)	ASTM D-4751	500,000 SF	70 (0.212)	70 (0.212)	80 (0.180)	100 (0.150)	100 (0.150)	100 (0.150)
Permittivity, sec ⁻¹	ASTM D-4491	500,000 SF	1.8	1.5	1.3	1.1	1.0	0.7
Permeability cm/sec	ASTM D-4491	500,000 SF	0.21	0.25	0.30	0.29	0.29	0.26
Water Flow Rate, g/min/sf (l/min/m ²)	ASTM D-4491	500,000 SF	135 (5500)	110 (4479)	95 (3895)	80 (3280)	60 (2445)	50 (2050)
Roll Dimensions⁴								
Length, ft (m)			1,200 (110)	825 (252)	600 (183)	525 (160)	405 (123)	300 (92)
Area, sf (m ²)			18,000 (1,672)	12,375 (1,150)	9,000 (836)	7,875 (732)	6,075 (564)	4,500 (418)

Notes:

1. Effective February 2018 and subject to change without notice.
2. Values established at the time of manufacturing. Handling, storage, and shipping may change these properties.
3. Apparent Opening Size, (AOS), reported as maximum average roll value.
4. Standard roll width is 15' (4.6 m)

All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable; however, it is the users responsibility to determine the suitability for their own use of the products described herein. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by AGRU America as to the effects of such use or the results to be obtained, nor does AGRU America assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.