

# AGRUTex® Civil Applications

## NONWOVEN GEOTEXTILES

AGRUTex is well-suited to exceed civil engineering project requirements and is capable of filling roles in areas like filtration, drainage, and separation. The nonwoven geotextile is available in weight classes ranging between 4 and 34 oz/yd<sup>2</sup>. For heavy-duty applications, 16 oz/yd<sup>2</sup> AGRUTEX serve to reinforce structural elements like soil banks to help prevent erosion along rivers and the coast. For operations requiring a filtration element, 4 oz/yd<sup>2</sup> AGRUTEX is useful to collect larger particulates from fluids before your drainage system becomes infiltrated with soil particles. Because AGRUTEX is so customizable, there are dozens of applications across a host of civil engineering applications. For this reason, AGRU encourages and welcomes inquiries about how AGRUTEX can be customized for upcoming projects.

**Agrutex®** geotextiles are a series of polypropylene, staple fiber, needle punched nonwovens. The fibers are needled together 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.

**Agrutex** standard products conform to the property values listed below.<sup>1</sup> AGRU America's Laboratories are accredited by the Geosynthetic Accreditation Institute's Laboratory Accreditation Program (GAI-LAP).

Style Name			AT040	AT060	AT080	AT100	AT120	AT160
Property	Test Method	Frequency	Minimum Average Roll Values					
<b>Mechanical</b>								
Grab Tensile, lbs (N)	ASTM D-4632	100,000 SF	100 (450)	160 (710)	205 (910)	250 (1113)	300 (1330)	380 (1690)
Elongation, %	ASTM D-4632	100,000 SF	50	50	50	50	50	50
CBR Puncture, lbs (kN)	ASTM D-6241	500,000 SF	310 (1.4)	410 (1.8)	500 (2.2)	700 (3.1)	800 (3.6)	1025 (4.6)
Trapezoidal Tear, lbs (N)	ASTM D-4533	100,000 SF	50 (223)	60 (269)	80 (359)	100 (450)	115 (510)	140 (623)
<b>Endurance</b>								
UV Resistance % Strength Retained after 500 hrs	ASTM D-4355	Formulation	70	70	70	70	70	70
<b>Hydraulic<sup>2</sup></b>								
Apparent Opening Size <sup>3</sup> , 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 <sup>-1</sup>	ASTM D-4491	500,000 SF	1.8	1.4	1.1	1.0	0.8	0.5
Water Flow Rate, g/min/sf (l/min/m <sup>2</sup> )	ASTM D-4491	500,000 SF	135 (5500)	110 (4479)	90 (3675)	75 (3056)	70 (2852)	45 (1833)
<b>Roll Dimensions<sup>4</sup></b>								
	Length, ft (m)		1,200 (110)	825 (252)	600 (183)	525 (160)	405 (123)	300 (92)
	Area, sf (m <sup>2</sup> )		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.

