

## Geocomposite

The best choice for drainage applications requiring filtration to keep silt and soil particles from clogging flow or when you need increased friction characteristics that bonding to a geotextile to a geonet will produce.

A synthetic drainage media, Agru's Geocomposite is designed to replace one to two feet of traditional aggregate while providing drainage under site loads, gradients and site conditions.

Agru's Geocomposite is available in both single-sided and double-sided products with geonet core thicknesses from 200mm to 300mm and fabric ranging from 4oz. to 12oz.

The geotextile is bonded to the geonet with a hot knife application – allowing for high bond strength without the reduction of transmissivity values of other processes.

## Geonet

A high density polyethylene resin, Geonet is ideal for applications such as landfill cells, leak location in double-lined systems, landfill caps for drainage and methane gas collection, and landscape drainage systems.

A biaxial/biplanar geonet, the material's rib formation allows for high flow in both machine and cross machine directions. With thicknesses ranging from 200mm to 300mm Agru Geonet exhibits chemical resistance equal to our HDPE geomembrane materials; the material is UV stabilized.

## 200mm

### Geonet Component <sup>(1)</sup> 200mm

Property	Test Method	Frequency	Minimum Average Roll Value
Thickness, mil (mm)	ASTM D5199	50,000 sf	200 (5.1)
Peak Tensile Strength MD, lbs./ in. (N/mm)	ASTM D5035/7179	50,000 sf	45 (7.9)
Density, g/cm <sup>3</sup>	ASTM D792, Method B	50,000 sf	0.94
Carbon Black Content (%)	ASTM D4218	50,000 sf	2-3
Transmissivity(2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf	2 x 10 <sup>-3</sup> (9.6)



## Geotextile Component (1) 200mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Mass per Unit Area, oz./sq. yd. (g/m <sup>2</sup> )	ASTM D5261	100,000 sf	6.0 (203)	8.0 (271)	10.0 (339)
Grab Tensile Strength, lbs.(N)	ASTM D4632	100,000 sf	170 (757)	220 (979)	270 (1200)
Grab Elongation, %	ASTM D4632	100,000 sf	50	50	50
Trapezoidal Tear, lbs. (N)	ASTM D4533	100,000 sf	65 (289)	95 (423)	105 (467)
CBR Puncture , lbs (N)	ASTM D6241	500,000 sf	435 (1935)	600 (2670)	725 (3230)
Permittivity(3), sec.-1	ASTM D4491	500,000 sf	1.5	1.3	1.1
Water Flow, (3) gpm./ ft <sup>2</sup> (l/min/m <sup>2</sup> )	ASTM D4491	500,000 sf	110 (4479)	95 (3895)	80 (3280)
AOS, U.S. Sieve max (mm)(3)	ASTM D4751	500,000 sf	70 (0.212)	80 (0.180)	100 (0.150)

## Geocomposite 200mm

Property	Test Method	Frequency	Minimum	Average	Roll Value	
Ply Adhesion, lbs./ in. (g/cm)	ASTM D7005	50,000 sf	1 (178)	1 (178)	1 (178)	
Transmissivity (2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf	1 x 10 <sup>-4</sup> (0.5)	1 x 10 <sup>-4</sup> (0.5)	9 x 10 <sup>-5</sup> (0.4)	Double
	ASTM D4716	500,000 sf	1 x 10 <sup>-3</sup> (4.8)	1 x 10 <sup>-3</sup> (4.8)	9 x 10 <sup>-4</sup> (4.3)	Single

## Geocomposite Supply Information 200mm (Standard Roll Dimensions)

Standard Roll Length(4) at Fabric Weight	6-oz	8-oz	10-oz
Double Sided	230	200	190
Single Sided	250	250	240

## 250mm

### Geonet Component (1) 250mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Thickness, mil (mm)	ASTM D5199	50,000 sf		250 (6.4)	
(N/mm)	ASTM D5035/7179	50,000 sf		55 (9.6)	
Density, g/cm <sup>3</sup>	ASTM D792, Method B	50,000 sf		0.94	
Carbon Black Content (%)	ASTM D4218	50,000 sf		2-3	
Transmissivity(2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf		3 x 10 <sup>-3</sup> (14.5)	

# Lining Systems

Geocomposites and Geonet

## Geotextile Component (1) 250mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Mass per Unit Area, oz./sq. yd. (g/m <sup>2</sup> )	ASTM D5261	100,000 sf	6.0 (203)	8.0 (271)	10.0 (339)
Grab Tensile Strength, lbs.(N)	ASTM D4632	100,000 sf	170 (757)	220 (979)	270 (1200)
Grab Elongation, %	ASTM D4632	100,000 sf	50	50	50
Trapezoidal Tear, lbs. (N)	ASTM D4533	100,000 sf	65 (289)	95 (423)	105 (467)
CBR Puncture , lbs (N)	ASTM D6241	500,000 sf	435 (1935)	600 (2670)	725 (3230)
Permittivity(3), sec.-1	ASTM D4491	500,000 sf	1.5	1.3	1.1
Water Flow, (3) gpm./ ft <sup>2</sup> (l/min/m <sup>2</sup> )	ASTM D4491	500,000 sf	110 (4479)	95 (3895)	80 (3280)
AOS, U.S. Sieve max (mm)(3)	ASTM D4751	500,000 sf	70 (0.212)	80 (0.180)	100 (0.150)

## Geocomposite 250mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Thickness, mil (mm)	ASTM D5199	50,000 sf		200 (5.1)	
Peak Tensile Strength MD, lbs./ in. (N/mm)	ASTM D5035/7179	50,000 sf		45 (7.9)	
Density, g/cm <sup>3</sup>	ASTM D792, Method B	50,000 sf		0.94	
Carbon Black Content (%)	ASTM D4218	50,000 sf		2-3	
Transmissivity(2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf		2 x 10 <sup>-3</sup> (9.6)	

## Geocomposite Supply Information 250mm (Standard Roll Dimensions)

Standard Roll Length(4) at Fabric Weight	6-oz	8-oz	10-oz
Double Sided	200	190	180
Single Sided	220	220	210

## 275mm

## Geonet Component (1) 275mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Thickness, mil (mm)	ASTM D5199	50,000 sf		275 (7.0)	
Peak Tensile Strength MD, lbs./ in. (N/mm)	ASTM D5035/7179	50,000 sf		65 (11.4)	
Density, g/cm <sup>3</sup>	ASTM D792, Method B	50,000 sf		0.94	
Carbon Black Content (%)	ASTM D4218	50,000 sf		2 -3	
Transmissivity(2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf		6 x 10 <sup>-3</sup> (29)	



## Geotextile Component (1) 275mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Mass per Unit Area, oz./sq. yd. (g/m <sup>2</sup> )	ASTM D5261	100,000 sf	6.0 (203)	8.0 (271)	10.0 (339)
Grab Tensile Strength, lbs.(N)	ASTM D4632	100,000 sf	170 (757)	220 (979)	270 (1200)
Grab Elongation, %	ASTM D4632	100,000 sf	50	50	50
Trapezoidal Tear, lbs. (N)	ASTM D4533	100,000 sf	65 (289)	95 (423)	105 (467)
CBR Puncture , lbs (N)	ASTM D6241	500,000 sf	435 (1935)	600 (2670)	725 (3230)
Permittivity(3), sec.-1	ASTM D4491	500,000 sf	1.5	1.3	1.1
Water Flow, (3) gpm./ ft <sup>2</sup> (l/min/m <sup>2</sup> )	ASTM D4491	500,000 sf	110 (4479)	95 (3895)	80 (3280)
AOS, U.S. Sieve max (mm)(3)	ASTM D4751	500,000 sf	70 (0.212)	80 (0.180)	100 (0.150)

## Geocomposite 275mm

Property	Test Method	Frequency	Minimum	Average	Roll Value	
Ply Adhesion, lbs./ in. (g/cm)	ASTM D7005	50,000 sf	1 (178)	1 (178)	1 (178)	
Transmissivity (2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf	7 x 10 <sup>-4</sup> (3.4)	7 x 10 <sup>-4</sup> (3.4)	5 x 10 <sup>-4</sup> (2.4)	Double
	ASTM D4716	500,000 sf	2 x 10 <sup>-3</sup> (9.6)	2 x 10 <sup>-3</sup> (9.6)	1.5 x 10 <sup>-3</sup> (7.2)	Single

## Geocomposite Supply Information 275mm (Standard Roll Dimensions)

Standard Roll Length(4) at Fabric Weight	6-oz	8-oz	10-oz
Double Sided	180	170	160
Single Sided	200	200	190

## 300mm

### Geonet Component (1) 300mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Thickness, mil (mm)	ASTM D5199	50,000 sf		300 (7.6)	
(N/mm)	ASTM D5035/7179	50,000 sf		75 (13.3)	
Density, g/cm <sup>3</sup>	ASTM D792, Method B	50,000 sf		0.94	
Carbon Black Content (%)	ASTM D4218	50,000 sf		2 - 3	
Transmissivity(2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf		8 x 10 <sup>-3</sup> (38.6)	

## Geotextile Component (1) 300mm

Property	Test Method	Frequency	Minimum	Average	Roll Value
Mass per Unit Area, oz./sq. yd. (g/m <sup>2</sup> )	ASTM D5261	100,000 sf	6.0 (203)	8.0 (271)	10.0 (339)
Grab Tensile Strength, lbs.(N)	ASTM D4632	100,000 sf	170 (757)	220 (979)	270 (1200)
Grab Elongation, %	ASTM D4632	100,000 sf	50	50	50
Trapezoidal Tear, lbs. (N)	ASTM D4533	100,000 sf	65 (289)	95 (423)	105 (467)
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Permittivity(3), sec.-1	ASTM D4491	500,000 sf	1.5	1.3	1.1
Water Flow, (3) gpm./ ft <sup>2</sup> (l/min/m <sup>2</sup> )	ASTM D4491	500,000 sf	110 (4479)	95 (3895)	80 (3280)
AOS, U.S. Sieve max (mm)(3)	ASTM D4751	500,000 sf	70 (0.212)	80 (0.180)	100 (0.150)

## Geocomposite 300mm

Property	Test Method	Frequency	Minimum	Average	Roll Value	
Ply Adhesion, lbs./ in. (g/cm)	ASTM D7005	50,000 sf	1 (178)	1 (178)	1 (178)	
Transmissivity (2), m <sup>2</sup> /sec. (gal/min/ft)	ASTM D4716	500,000 sf	9 x 10 <sup>-4</sup> (4.3)	9 x 10 <sup>-4</sup> (4.3)	7 x 10 <sup>-4</sup> (3.4)	Double
	ASTM D4716	500,000 sf	3 x 10 <sup>-3</sup> (14.5)	3 x 10 <sup>-3</sup> (14.5)	2 x 10 <sup>-3</sup> (9.6)	Single

## Geocomposite Supply Information 300mm (Standard Roll Dimensions)

Standard Roll Length(4) at Fabric Weight	6-oz	8-oz	10-oz
Double Sided	160	150	140
Single Sided	180	180	170

## Benefits of Geocomposite and Geonet

- Cost effective – saves air space in landfill cells
- Chemical resistant, consistently reliable
- Easy to install

### Notes:

- (1) Component properties are prior to lamination
- (2) Geonet & Geocomposite . Transmissivity at 21°C, gradient of 0.1, load of 10,000psf, seat time 15 min. between steel plates.
- (3) At time of manufacture. Handling may change these properties.
- (4) All roll widths are 14.5 feet. All roll lengths and widths have a tolerance of ±1%
- (5) UV Resistance after 500 hours for the geotextile componet exhibits 70% strength retained via ASTM D4355

