



Drainage



Reinforcement

ADS GEOSYNTHETICS TN220 SPECIFICATION

Scope

This specification describes ADS Geosynthetics TN220 Geocomposite.

ADS Geosynthetics TN220 Geocomposite consists of geonet made from HDPE resin with a non-woven polypropylene geotextile fabric heat bonded on both sides of the geonet.

Filter Fabric Properties

Property	Test Method	Unit	Required Value			Qualifier
			With 6 oz.	With 8 oz.	With 10 oz.	
Geonet						
Thickness	ASTM D5199	mil.	220±20	220±20	220±20	Range
Carbon Black	ASTM D4218	%	2 to 3	2 to 3	2 to 3	Range
Tensile Strength	ASTM D7179	lb/in	45	45	45	Minimum
Melt Flow	ASTM D1238 ³	g/10 min	1	1	1	Minimum
Density	ASTM D1505	g/cm ³	0.94	0.94	0.94	Minimum
Transmissivity ¹	ASTM D4716	m ² /sec.	2x10 ⁻³	2x10 ⁻³	2x10 ⁻³	MARV ²
Composite						
Ply Adhesion (Minimum)	ASTM D7005	lb/in	0.5	0.5	0.5	MARV
Ply Adhesion (Average)	ASTM D7007	lb/in	1	1	1	MARV
Transmissivity ¹	ASTM D4716	m ² /sec.	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	MARV
Geotextile						
Fabric Weight	ASTM D5261	oz/yd ²	6	8	10	MARV
Grab Strength	ASTM D4632	lbs	160	225	270	MARV
Grab Elongation	ASTM D4632	%	50	50	50	MARV
Tear Strength	ASTM D4533	lbs	65	90	100	MARV
Puncture Resistance	ASTM D4833	lbs	95	130	165	MARV
CBR Puncture	ASTM D6241	lbs	475	650	825	MARV
Water Flow Rate	ASTM D4491	gpm/ft ²	125	100	75	MARV
Permittivity	ASTM D4491	sec ⁻¹	1.63	1.26	0.94	MARV
Permeability	ASTM D4491	cm/sec	0.3	0.3	0.3	MARV
Transmissivity ¹	ASTM D4716	m ² /sec.	1x10 ⁻⁴	1x10 ⁻⁴	1x10 ⁻⁴	MARV

NOTES:

1. Transmissivity measure water at 21 ± 2° (70 ± 4°F) with a gradient of 0.1 and a confining pressure of 10,000 psf between stainless steel plates after 15 minutes. Values may vary between individual labs.
2. MARV is statistically defined as mean minus two standard deviations and it is the value which is exceeded by 97.5% of all the test data.
3. Condition 190/2.16