

TEXEL GVG SYNTHETICS

TECHNICAL DATASHEET

Geovegetation (GVG) type	Synthetic fibers erosion control mat
Composition	Polypropylene
Main function	Protection

Property	Test method	X3 TRM450 ⁽¹⁾	3D TRM25	3D HPTRM
Physical				
Structure	-	Interlaced fibers between 2 nets	Three-dimensional pyramidal structure	
Surface weight	ASTM D6566	340 g/m ²	271 g/m ²	475 g/m ²
Thickness	ASTM D6525	10.2 mm	6.4 mm	10.2 mm
Color	-	Green or tan	Green or tan	Green or tan
Light penetration (max % passing)	ASTM D6567	20%	35%	10%
Mechanical				
Tensile strength (MD X CD)	ASTM D6818	5.8 X 4.4 kN/m	29.2 X 26.3 kN/m	58.4 X 43.8 kN/m
Elongation (MD X CD)	ASTM D6818	50 X 50 %	20 X 20 %	40 X 35 %
Flexibility ⁽¹⁾	ASTM D6575	30 000 mg-cm	225 000 mg-cm	616 150 mg-cm
Resiliency	ASTM D6524	90%	70%	80%
UV Resistance ⁽¹⁾	ASTM D4355	80% / 1 000h	90%/ 1 000h - 90% / 3 000h	90% / 3 000h - 90% / 6 000h
Performance (vegetalized)				
Max velocity ⁽¹⁾⁽²⁾	-	5.5 m/sec	6.10 m/sec	7.6 m/sec
Max shear resistance ⁽¹⁾⁽²⁾	-	479 Pa	575 Pa	766 Pa
Manning coefficient ⁽¹⁾⁽³⁾	-	0.025	0.028	0.028
Seedling emergence ⁽¹⁾	ASTM D7322	409%	255%	296%
Dimensions				
Width	-	2.42 m	2.6 m	2.6 m
Length	-	42.2 m	36.6 m	36.6 m

This technical information comes from the manufacturer and was transcribed by Texel. Properties are based on minimum average roll values (MARV) except when specified otherwise.

1 - Typical value

2 - Maximum permissible velocity and shear stress has been obtained through vegetated testing programs featuring specific soil types, vegetation classes, flow conditions, and failure criteria. These conditions may not be relevant to every project.

3 - Calculated as typical values from large-scale flexible channel lining test programs with a flow depth of 150 to 300 mm.

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