

## Geo Mat – without steel

TerraShield Geo Mat provides permanent erosion protection by mimicking natural root structures that bind and stabilize soil. Made from polypropylene monofilaments, they promote rapid vegetation growth and offer long-term root support against harsh erosion forces. Ideal for areas where vegetation alone cannot prevent erosion, such as riverbanks, drainage channels, and steep slopes.

## Applications



Canal & Riverbank Protection



Slope Protection



Road & Railway Embankments



Landfill & Dumpsite Covers



Coastal & Shore-line protection



Golf courses, parks & landscaping



Drainage Channels & Waterways



Pipeline & Culvert outlet protection

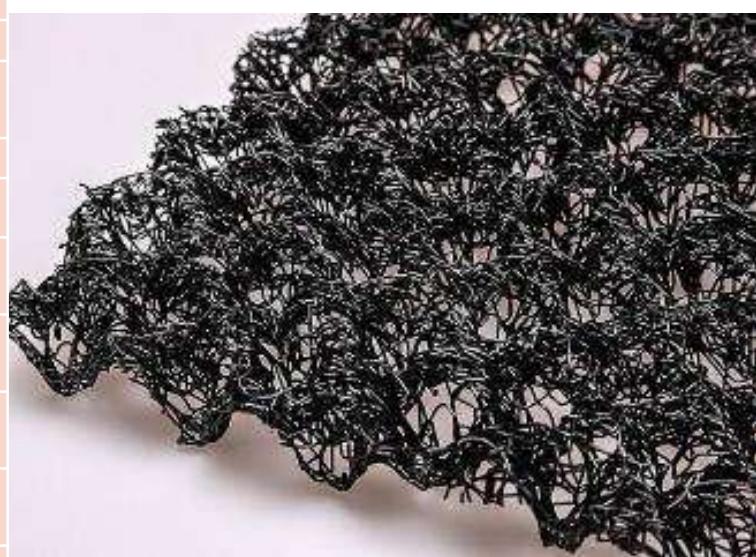
## Features

- 3D porous structure that locks soil particles with **steel reinforcement**
- Promotes root interlock & vegetation growth
- Lightweight & easy to install
- UV stabilized & resistant to biological/chemical degradation
- Long service life & low maintenance

## SPECIFICATIONS

### GEO MAT - SPECIFICATIONS

PARTICULARS	UNITS	VALUE	MPEV
<b>Three-dimensional polymer core layer</b>	<b>PP</b>		
<b>Porosity</b>	%	≥95%	
<b>Polymer density</b>	kg/m <sup>3</sup>	1140	±50
<b>Unit grammage</b>	g/m <sup>2</sup>	500	±50
<b>Thickness</b>	mm	17	±3
<b>Tensile strength (transverse)</b>	KN/m	2.2	±0.6
<b>Tensile strength (longitudinal)</b>	KN/m	2	±0.6
<b>Elongation at break (transverse)</b>		>40%	
<b>Elongation at break (longitudinal)</b>		>80%	
<b>Roll Sizes (m)</b>	M	2*25	
<b>Black &amp; UV stabilized</b>			



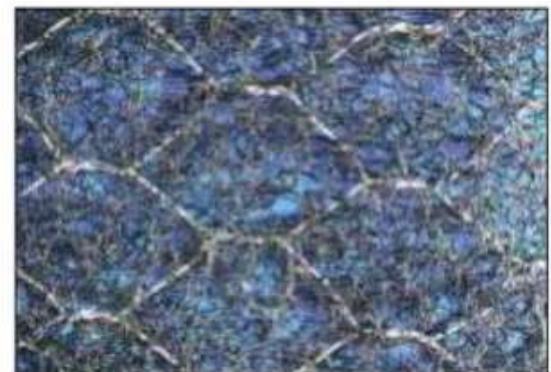
## Geo Mat - WITH STEEL REINFORCEMENT

### GEOMAT FEATURES & SPECIFICATIONS:

- A. TerraShield Geomat consists of a three-dimensional matrix made of polypropylene filaments that is extruded onto a double twisted hexagonal steel wire mesh reinforcement element during the manufacturing process. The polypropylene has a minimum mass per unit area equal to 450 gr/m<sup>2</sup>.
- B. The metallic reinforcement is a double twisted wire mesh (hexagonal mesh) type 6x8 according to EN 10223-3. The minimum diameter of the steel wire mesh is 2.2 mm. The nominal thickness of PVC coating will not be less than 0.4mm. The coating thickness will be Class A, as per EN 10244-2.
- C. The coating will not contain heavy metals and be resistant to:
  - 1. Outwearing accelerated ageing: When subject to test in Sulphur dioxide environment (EN ISO 6988): after 28 cycles of discontinuous test the mesh will not show more than 5% of DBR (Dark Brown Rust).
  - 2. Outwearing accelerated ageing in salt spray (ISO 9227): After 6,000 hours of exposure, the mesh will not show more than 5% of DBR (Dark Brown Rust).
  - 3. UV radiation, in accordance with ISO 4892-3, type 1A: After 2,500 hours of exposure to QUV-A the tensile strength and elongation at break of the base compound will not change more than 25% from the initial test results. The polymer coating will not release phthalates during the degradation process.
- D. The composite will meet and conform to the following certifiable average values when tested in accordance with the proper EN, ASTM or ISO test methods:
  - 1. Tensile strength not lower than 37 kN/m (EN ISO 10319)
  - 2. Voids index of the mat shall not be lower than 90%
  - 3. Nominal thickness not lower than 12 mm (EN 9863-1)
  - 4. Mass per unit area not lower than 1900 g/m<sup>2</sup> (EN ISO 9864)

### Features

- A. 3D porous structure that locks soil particles with **steel reinforcement**
- B. Promotes root interlock & vegetation growth
- C. Lightweight & easy to install
- D. UV stabilized & resistant to biological/chemical degradation
- E. Long service life & low maintenance



## Geo Mat - WITH STEEL REINFORCEMENT

### GEO MAT (with Steel Reinforcement) SPECIFICATIONS

POLYMER	UNITS	POLYPROPYLENE	
Mass per unit area (EN ISO 9864) ±10	g/m <sup>2</sup>	450	
Polymer	°C	150	
Polymer	kg/m <sup>3</sup>	900	
Polymer		STABILIZED	
REINFORCEMENT			
TYPE		Double twisted woven steel wire mesh heavily GI coated	Double twisted woven steel wire mesh with an additioanl PVC coating
Mesh Type	cm	6x8	6x8
Wire Diameter (int./ext.)	mm	2.20	2.20/3.20
Nominal PVC coating thickness	mm	Not present	0.5
Mechanical Properties Compostie			
Nominal longitudinal resistance	kN/m	40 ± 3	40 ± 3
Nominal Physical Properties Compostie			
Mass per unit area (EN ISO 9864)	g/m <sup>2</sup>	1630	1920
Voids Index	%	>90	
Nominal Thickness (EN ISO 9863-1)	mm	12	
Geomat Colour		BLACK	
Roll Length	m	25	
Roll Width	m	2	
Roll Area	m <sup>2</sup>	50	

