

# TechGrid – TGU - 400

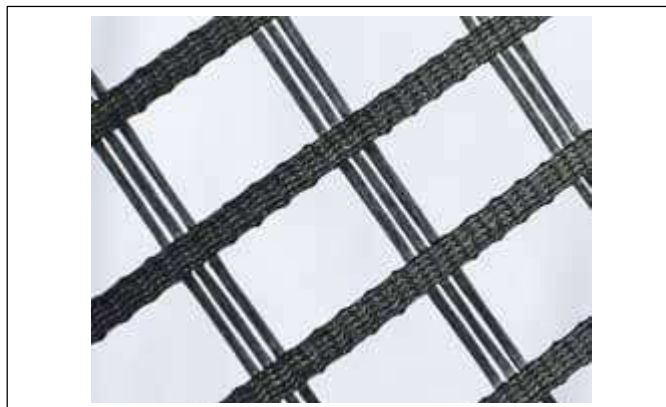
## PRODUCT DATASHEET



**TechGrid U series** are uniaxial knitted polyester geogrids, with a polymeric coating engineered for demanding soil reinforcement applications. The high tenacity polyester yarns are formed into a dimensionally stable grid structure with uniform apertures, using an advanced weft insertion warp knitting process, which is then given a tough and durable polymeric coating to enhance dimensional stability, resistance to installation damage and durability.

Physical Properties:	Units		TGU-400	Test Method
Composition	Woven filament, high tenacity, polyester yarns			
Tensile Strength (Ultimate) <sup>1</sup>	MD	kN/m	≥ 400	EN-ISO-10319
	CD	kN/m	≥ 30	
Elongation (@ Ultimate ± 2%)	MD	%	10	EN-ISO-10319
	CD	%	10	
Reduction Factor (RF) and factor of safety (f <sub>s</sub> ) for calculation of MD Long-term Design Strength (LTDS):				
Creep (RF <sub>CR</sub> ) – 120 years design life at 20°C temperature			1.45	EN-ISO
Creep Limited Strength		kN/m	275.9	
Installation damage (RF <sub>ID</sub> )	Sand/silt/clay		1.02	
Partial Factor - environmental effect, pH = 5 to 9			1.07	
Factor of Safety for 120 years (f <sub>s</sub> )			1.09	
LTDS – 120 YEARS: Sand/silt/clay for pH = 5 to 9		kN/m	231.9	
Aperture size (Tolerance ± 2mm)		30mm x 18mm		
Roll Width x Length		5.1m x 100m		

1. Average (typical) Value obtained in accredited laboratories.



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