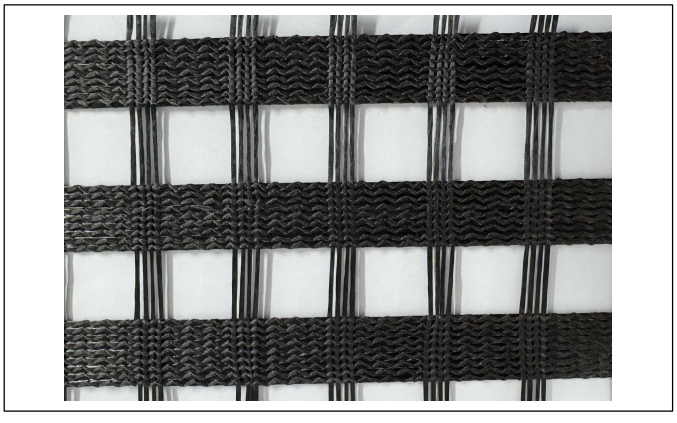
TechGrid – TGU – 400

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)[1]	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_s) for calculation of MD Long-term Design Strength (LTDS):				
Creep (RF_{CR}) – 120 years design life at 20°C temperature			**1.45**	EN-ISO
Creep Limited Strength		**kN/m**	**275.9**	
Installation damage (RF_{ID})	Sand/silt/clay		**1.02**	
Partial Factor - environmental effect, pH = 5 to 9			**1.07**	
LTDS – 120 YEARS: Sand/silt/clay for pH = 5 to 9		**kN/m**	**252.8**	
Aperture size (Tolerance ± 2mm)	**30mm x 18mm**			
Roll Width x Length	**5.1m x 100m**			

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