

## TechGrid TGU 40

TechGrid TGU 40 uniaxial geogrid is manufactured from high tenacity polyester (PET) yarn, knitted into a structural geogrid network and polymer coated to produce a dimensionally stable product. TechGrid geogrid is inert to biological degradation and resistant to naturally encountered chemicals, alkalis and acids.

TechFab utilizes highly advanced knitting and coating technology to produce world class products engineered for demanding soil reinforcement applications. TechGrid TGU 40 is typically utilized in a variety of soil reinforcement applications such as segmental retaining walls, temporary and permanent wire walls, reinforced slopes, subgrade stabilization, embankments over soft soils, landfill expansions and surcharged embankments.

TechGrid is manufactured in state-of-the-art ISO 9001:2015 certified manufacturing facilities subject to stringent quality control processes at all stages of production. TechFab in-house quality control laboratories are accredited by Geosynthetic Accreditation Institute - Laboratory Accreditation Program (GAI-LAP) and National Accreditation Board for Testing and Calibration Laboratories (NABL).

Tensile Properties	Test Method	Units	Minimum Average Roll Value (MARV) Machine Direction (MD)
Ultimate Tensile Strength	ASTM D6637 (Method B)	lbs/ft (kN/m)	2741 (40)
Tensile Strength at 5% Strain	ASTM D6637 (Method B)	lbs/ft (kN/m)	1370 (20)
			Minimum Roll Value (MD)
Creep Limited Strength <sup>1</sup>	ASTM D6692/D5262	lbs/ft (kN/m)	1903 (27.8)
Long Term Design Strength (LTDS) <sup>2</sup>		lbs/ft (kN/m)	1648 (24.1)

Physical Properties	Units	Roll Size
Roll Dimensions <sup>3</sup> (width x length)	ft (m)	6.23 x 347 (1.9 x 106) 6.6 x 328 (2 x 100)
Roll Area	yd <sup>2</sup> (m <sup>2</sup> )	240 (200)
Estimated Roll Weight	lbs (kg)	89.3 (40.5) 89.3 (40.5)

<sup>1</sup> 75-year design life

<sup>2</sup> Values based on soils with classifications of sand, silt or clay (SW, SP, SP-SM, SM, SC, CL, ML)  $RF_{cr}=1.44$ ,  $RF_{ID}=1.05$ ,  $RF_D=1.10$   
Adjustable to other soil types.

<sup>3</sup> Custom roll sizes available for special order or large project orders.

To the best of our knowledge this information is accurate. Final determination of the suitability of any information or material is the sole responsibility of user. TechFab USA does not provide design or engineering services and has not performed any such design services to verify TechFab's material compiles with any particular system, project, purpose, installation or specifications.