TechGrid – TGC B 105

PRODUCT DATASHEET

TechGrid TGC series are knitted non-woven geotextile composites, incorporating high tenacity yarns in both directions. The high tenacity polyester yarns with low creep strain perform the reinforcement function, while the polypropylene needle punched non-woven geotextile provides both separation and drainage.

Physical Properties:	Units		TGC-105/105	Test Method
Composition	**Knitted, high tenacity, polyester yarns**			
[1]Tensile Strength (Ultimate)	MD/CD	kN/m	**105**	EN ISO-10319
Elongation @ Ultimate (±2)	MD/CD	%	**10**	
Tensile Strength @ 2% Strain	MD/CD	kN/m	**18**	
Tensile Strength @ 5% Strain	MD/CD	kN/m	**45**	
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			**1.54**	ASTM D 6992
Installation damage with yarn facing soil (RF_{ID})	Sand/silt/clay		**1.02**	
Durability (RF_{CH}), 120 years design life at 20°C temperature, pH = 4 to 8.9			**1.10**	
Weathering (RF_W)	To be covered in 1 day		**1.00**	
Factor of safety for extrapolation of data for 120 years (f_s)			**1.00**	
LTDS – 120 YEARS: Sand/silt/clay for pH = 4 to 8.9		**kN/m**	**60.8**	
Hydraulic Properties:				
Water Permeability Normal to the Plane (-25)	$l/m^2/s$		**112.0**	EN ISO-11058
Apparent Pore Opening Size	µm		**150**	EN ISO-12956
Standard Roll Dimensions:				
Roll Width x Length	**5m x 100m**			

1. Minimum Average Roll Value (MARV).