

# 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
<b>Composition</b>	<b>Knitted, high tenacity, polyester yarns</b>			
<sup>1</sup> Tensile Strength (Ultimate)	MD/CD	kN/m	<b>105</b>	EN ISO-10319
Elongation @ Ultimate (±2)	MD/CD	%	<b>10</b>	
Tensile Strength @ 2% Strain	MD/CD	kN/m	<b>18</b>	
Tensile Strength @ 5% Strain	MD/CD	kN/m	<b>45</b>	
<b>Reduction Factor (RF) and factor of safety (f<sub>s</sub>) for calculation of MD Long-term Design Strength (LTDS):</b>				
<b>Creep (RF<sub>CR</sub>) – 120 years design life at 20°C temperature</b>			<b>1.54</b>	EN ISO
<b>Installation damage with yarn facing soil (RF<sub>ID</sub>)</b>	Sand/silt/clay		<b>1.02</b>	
<b>Durability (RF<sub>CH</sub>), 120 years design life at 20°C temperature, pH = 4 to 8.9</b>			<b>1.10</b>	
<b>Weathering (RF<sub>w</sub>)</b>	To be covered in 1 day		<b>1.00</b>	
<b>Factor of safety for extrapolation of data for 120 years (f<sub>s</sub>)</b>			<b>1.00</b>	
<b>LTDS – 120 YEARS: Sand/silt/clay for pH = 4 to 8.9</b>		<b>kN/m</b>	<b>60.8</b>	
<b>Hydraulic Properties:</b>				
<b>Water Permeability Normal to the Plane (-25)</b>	l/m <sup>2</sup> /s		<b>112.0</b>	EN ISO-11058
<b>Apparent Pore Opening Size</b>	µm		<b>150</b>	EN ISO-12956
<b>Standard Roll Dimensions:</b>				
<b>Roll Width x Length</b>	<b>5m x 100m</b>			

1. Minimum Average Roll Value (MARV).



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