

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).



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