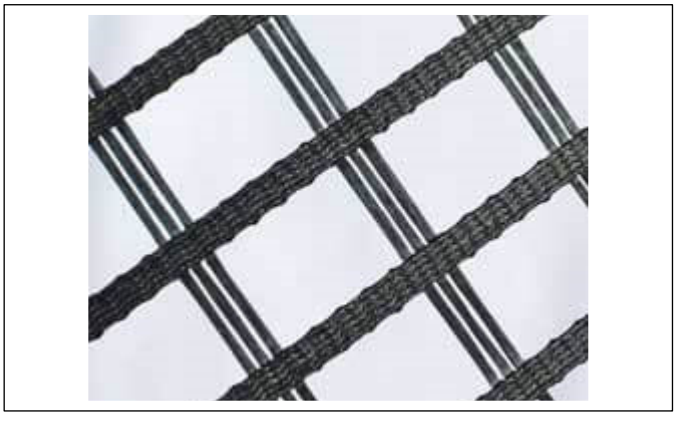
# TechGrid – TGU - 200

*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-200 | Test Method |
|---|---|---|---|---|
| **Composition** | **Woven filament, high tenacity, polyester yarns** | | | |
| **Tensile Strength (Ultimate)[1]** | MD | kN/m | **≥ 200** | 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** | **137.9** | |
| **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** | **126.4** | |
| **Aperture size (Tolerance ± 2mm)** | **30mm x 23mm** | | | |
| **Roll Width x Length** | **5.1m x 100m** | | | |

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