

## 180 UNIAXIAL

## Geogrid

Material: High tenacity polyester (PET) yarn, knitted into a stable geogrid and polymer coated.

Properties: Resistant to biological degradation, alkalis, acids, and naturally occurring chemicals.

Applications: Used for soil reinforcement in retaining walls, reinforced slopes, subgrade stabilization, embankments over soft soils, landfill expansions, and surcharged embankments.

Manufacturing: Produced in ISO 9001:2015 certified facilities with stringent quality control, accredited by GAI-LAP and NABL.

| TENSILE PROPERTIES                                                 | UNITS                             | MARV (MD)                  |
|--------------------------------------------------------------------|-----------------------------------|----------------------------|
| Ultimate Tensile Strength<br>ASTM D6637 (Method B)                 | lbs/ft (kN/m)                     | 12334 (180)                |
| MINIMUM ROLL VALUE (MD)                                            | UNITS                             | VALUE                      |
| Creep Limited Strength<br>114-year design life                     | lbs/ft (kN/m)                     | 8565 (125)                 |
| Long Term Design Strength (LTDS)<br>uses RFcr, RFID, and RFD below | lbs/ft (kN/m)                     | 7079 (103.3)               |
| REDUCTION FACTORS                                                  | UNITS                             | FACTOR                     |
| Creep Reduction Factor<br>20 C, 114-year design life               | RFCR                              | 1.44                       |
| Installation Damage Factor<br>ASTM D5818                           | RFID                              | 1.10                       |
| Environmental Effects Factor<br>GRI GG7 / GRI GG8                  | RFD                               | 1.10                       |
| PHYSICAL PROPERTIES                                                | UNITS                             | ROLL SIZE                  |
| Roll Dimensions<br>width x length                                  | m                                 | 1.9m x 100m<br>2.4m x 100m |
| Roll Area<br>calculated from offered roll sizes                    | yd <sup>2</sup> (m <sup>2</sup> ) | 227 (190)<br>287 (240)     |
| MOLECULAR PROPERTIES                                               | UNITS                             | VALUE                      |
| Molecular Weight<br>GRI GG8 / ASTM D4603                           | g/mol min.                        | 25,000                     |
| Carboxyl End Group (CEG)<br>GRI GG7 / ASTM D7409                   | mmol/kg max.                      | 30                         |

1 75-year design life

2 Values based on soils with classifications of sand, silt or clay (SW, SP, SP-SM, SM, SC, CL, ML) RFcr=1.44, RFID=1.10, RFD=1.10  
Adjustable to other soil types.

3 Roll sizes listed are current Geomods offered sizes per client direction: 1.9m x 100m, 2.4m x 100m.