

GT 220 Geogrid - Geotextile Geocomposite

TENAX GT 220 is a polypropylene geocomposite especially designed for soil stabilization and reinforcement applications. GT 220 geocomposite is manufactured by bonding a TENAX LBO 220 geogrid to a nonwoven polypropylene geotextile. GT 220 geocomposites feature superior high tensile strengths and modulus, excellent resistance to construction damage, and environmental exposure. GT 220 geogrid allows strong mechanical interlock with the soil being reinforced, while the geotextile provides separation and filtration without preventing the soil-geogrid interlock.

Typical Applications:

Coal Ash impoundment closures, base reinforcement, reduction of required structural fill, load distribution, reduction of mud pumping, subgrade stabilization, embankment and slope stabilization

GEOGRID PRODUCT PROPERTIES¹

| Technical Characteristics | Units | MD Values | XMD Values |
|------------------------------|--------------|--------------|--------------|
| Aperture Dimensions | mm (in) | 36 (1.42) | 31 (1.22) |
| Minimum Rib Thickness | mm (in) | 1.3 (0.05) | 1.0 (0.04) |
| Tensile Strength @ 2% Strain | kN/m (lb/ft) | 7.0 (480) | 7.0 (480) |
| Tensile Strength @ 5% Strain | kN/m (lb/ft) | 14.0 (960) | 14.0 (960) |
| Ultimate Tensile Strength | kN/m (lb/ft) | 20.0 (1,370) | 20.0 (1,370) |

GEOGRID STRUCTURAL INTEGRITY¹

| | | |
|---------------------|---------|-----------|
| Junction Efficiency | % | 93 |
| Flexural Stiffness | mg-cm | 1,000,000 |
| Aperture Stability | m-N/deg | 0.5 |

GEOGRID DURABILITY¹

| | | |
|-------------------------------------|-------------|----------|
| Resistance to Installation Damage | %SC/%SW/%GP | 95/93/90 |
| Resistance to Long Term Degradation | % | 100 |
| Resistance to UV Degradation | % | 100 |

GEOTEXTILE HYDRAULIC PROPERTIES¹

| | TEST METHOD | ENGLISH | METRIC |
|-----------------------------|-------------|-------------------------|---------------------------|
| Apparent Opening Size (AOS) | ASTM D-4751 | 70 US Std. Sieve | 0.212 mm |
| Permittivity | ASTM D-4491 | 2.0 sec ⁻¹ | 2.0 sec ⁻¹ |
| Water Flow Rate | ASTM D-4491 | 140 gpm/ft ² | 5689 l/min/m ² |

DIMENSIONS AND DELIVERY

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 4m (13.1-FT) in width and 50m (164-FT) in length.

Note

1. Property values for individual components are recorded prior to lamination.

Tenax warrants that the geogrid products delivered hereunder conform to the stated specification at the time of delivery. All other warranties including claims for performance or suitability for application are excluded. This product specification supersedes all prior specifications for the product described above and is not applicable for products shipped before November 2014.