

GT 440 Large Aperture Geogrid - Geotextile Geocomposite

TENAX GT 440 is a polypropylene geocomposite especially designed for soil stabilization and reinforcement applications. GT 440 geocomposite is manufactured by bonding a TENAX LBO 440 geogrid to a nonwoven polypropylene geotextile. GT 440 geocomposites feature superior high tensile strengths and modulus, excellent resistance to construction damage, and environmental exposure. GT 440 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)	35 (1.38)	45 (1.77)
Minimum Rib Thickness	mm (in)	4.0 (0.16)	3.0 (0.12)
Tensile Strength @ 2% Strain	kN/m (lb/ft)	14.0 (959)	15.0 (1,028)
Tensile Strength @ 5% Strain	kN/m (lb/ft)	28.0 (1,919)	30.0 (2,056)
Ultimate Tensile Strength	kN/m (lb/ft)	40.0 (2,741)	40.0 (2,741)

GEOGRID STRUCTURAL INTEGRITY¹

Junction Efficiency	%	93
Flexural Stiffness	mg-cm	4,800,000
Aperture Stability	m-N/deg	0.98

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.