

LBO 302 Type 2 Biaxial Geogrid

TENAX LBO 302 is a polypropylene geogrid especially designed for soil stabilization and reinforcement applications. LBO 302 geogrids are manufactured from a unique process of extrusion, and punched and drawn to biaxial orientation to enhance tensile properties. TENAX LBO 302 geogrids feature consistently high tensile strength and modulus, excellent resistance to construction damage, and environmental exposure.

Typical Applications:

Soft soil stabilization, base reinforcement, embankments over soft soils, working platforms, haul roads

PRODUCT PROPERTIES

Technical Characteristics	Units	MD Values ¹	XMD Values ¹
Aperture Dimensions ²	mm (in)	28 (1.10)	38 (1.49)
Minimum Rib Thickness ²	mm (in)	1.27 (0.05)	1.27 (0.05)
Tensile Strength @ 2% Strain ³	kN/m (lb/ft)	6.0 (410)	9.0 (620)
Tensile Strength @ 5% Strain ³	kN/m (lb/ft)	11.8 (810)	19.6 (1,340)
Ultimate Tensile Strength ³	kN/m (lb/ft)	19.2 (1,310)	28.8 (1,970)

STRUCTURAL INTEGRITY

Junction Efficiency ⁴	%	93
Flexural Stiffness ⁵	mg-cm	750,000 = 0.65 lb-in
Aperture Stability ⁶	m-N/deg	0.65

DURABILITY

Resistance to Installation Damage ⁷	%SC/%SW/%GP	95/93/90
Resistance to Long Term Degradation ⁸	%	100
Resistance to UV Degradation ⁹	%	100

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) or 4.87m (16-FT) in width and 50m (164-FT) in length.

Notes

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D6637-10 Method A.
2. Nominal dimensions.
3. Tensile Strength is determined in accordance with ASTM D6637-10 Method A.
4. Load transfer capability determined in accordance with ASTM D7737-11.
5. Resistance to bending force determined in accordance with ASTM D7748-12, using specimens cut with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of flexural stiffness.
6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment restrained at its perimeter in accordance with US Army Corps of Engineers Methodology for measuring geogrid stability.
7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D6637.
8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
9. Resistance to loss of load capacity or structural integrity when subjected to ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

REVIEWED

This drawing has been reviewed and returned as:

By: GBINGER

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NO EXCEPTIONS NOTED

Review is only for general conformance with design concept and intent for Contract Documents. Contractor is solely responsible for verifying dimensions, for establishing fabrication processes, means, techniques, sequences and procedures of construction and for coordination of work of all trades. Exceptions taken and noted to information shown does not authorize work resulting in contract cost revisions unless so stated in separate letter or Change Order.

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.