

TENAX LBO HM3 L



Bi-oriented geogrids

TENAX **LBO HM3 L** are HIGH MODULUS (HM) polypropylene integral geogrids especially designed for soil stabilisation and reinforcement applications and manufactured from a unique process of extrusion and biaxial orientation to enhance the tensile stiffness and overall performance when operating at low strains of 0.5% and 2%. They have been shown to increase the design life of projects by improving performance of the reinforced granular bases and reducing differential settlement. A larger than average aperture size and rib thickness combined with the high junction strength creates optimal interlock and confinement with coarse aggregate. The wide apertures allow for a wider range of granular material to be selected especially those materials having large granular stones thereby offering the potential for significant cost savings.

TENAX **LBO HM3 L** geogrids feature consistently high tensile strength and modulus, excellent resistance to construction damage and environmental exposure. Furthermore, the geometry of these geogrids allow for strong mechanical interlock to take place in applications such as ballast stiffening of railway construction layers.

Typical applications

Ballast reinforcement, load transfer platforms (LTPs), crane / piling platforms and access routes, HGV areas, airport runways, port loading areas and temporary or permanent access roads e.g. wind farm access roads.

PHYSICAL CHARACTERISTICS	TEST METHOD	DATA
STRUCTURE		BI-ORIENTED GEOGRIDS
MESH TYPE		SQUARE APERTURES
STANDARD COLOR		BLACK
POLYMER TYPE		POLYPROPYLENE
CARBON BLACK CONTENT	ASTM D4218	2.0%
PACKAGING	ISO 10320	ROLLS IN POLYETHYLENE BAGS WITH I.D. LABEL

DIMENSIONAL CHARACTERISTICS	TEST METHOD	UNIT	LBO HM3 L	Notes
MESH SIZE MD		mm	55	a,d
MESH SIZE CMD		mm	60	a,d
ROLL WIDTH		m	5.3	a
ROLL LENGTH		m	70	f

TECHNICAL CHARACTERISTICS	TEST METHOD	UNIT	LBO HM3 L		Notes
			MD	CMD	
TENSILE STRENGTH at 0.5% STRAIN	ISO 10319	kN/m	5.0	5.0	b,c,e
TENSILE STRENGTH at 2% STRAIN	ISO 10319	kN/m	12.0	12.0	b,c,e

NOTES:

- a) Typical values
- b) Tests performed using extensometers
- c) MD: machine direction (longitudinal to the roll)
CMD: transversal direction (across roll width)
- d) Mesh Size Tolerance: ±5 mm
- e) Tolerance: - 1 kN/m
- f) Other lengths on demand



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The TENAX Laboratory has been operational since 1980 and has been continuously improved with the purpose of assuring comprehensive technical development of the products and accurate Quality Control.

The TENAX Laboratory can perform mechanical, hydraulic and durability tests, according to the most important international standards like ISO, CEN, ASTM, DIN, BSI, UNI.

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