

# 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 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 (LTP's), 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 Colour	-	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	Value	Notes
Aperture Size MD	-	mm	60	a,d
Aperture Size CMD	-	mm	60	a,d
Roll Width	-	m	5.3	a
Roll Length	-	m	70	f

Technical Characteristics	Test Method	Unit	Value		Notes
Tensile Strength at 0.5% Strain	ISO 10319	kN/m	MD 5.0	CMD 5.0	b,c,e
Tensile Strength at 2% Strain	ISO 10319	kN/m	MD 12.0	CMD 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: +5mm
- e) Tolerance: - 1 kN/m
- f) Other lengths on demand

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