

# TENAX GT HM 4

## Geogrid - geotextile geocomposites



TENAX **GT** are polypropylene geocomposites especially designed for soil stabilisation and reinforcement applications.

The TENAX **GT** geocomposites are manufactured by bonding a TENAX **LBO HM** geogrid to a nonwoven polypropylene geotextile. TENAX **LBO HM** geogrids are HIGH MODULUS (HM) bi-oriented geogrids especially designed for soil stabilisation and reinforcement applications.

TENAX **LBO HM** geogrids are manufactured using a unique process of extrusion and biaxial orientation to enhance their tensile properties and overall performance when operating at low strains of 0.5% and 2%.

TENAX **GT** geocomposites feature superior high tensile strengths and modulus, excellent resistance to construction damages and environmental exposure. The TENAX **GT** 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

Base reinforcement; reduction of required structural fill; load distribution; reduction of mud pumping; subgrade stabilization; embankment and slope stabilization; asphalt reinforcement.

PHYSICAL CHARACTERISTICS	TEST METHOD	UNIT	DATA	NOTES
STRUCTURE			BI-ORIENTED GEOGRIDS	
MESH TYPE			RECTANGULAR 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	GT HM 4		NOTES
APERTURE SIZE MD		mm	40		b,d,e
APERTURE SIZE TD		mm	27		b,d,e
ROLL WIDTH		m	4.0		b
ROLL LENGTH		m	50		b
ROLL DIAMETER		m	0.5		b
ROLL VOLUME		m <sup>3</sup>	1.0		b

TECHNICAL CHARACTERISTICS	TEST METHOD	UNIT	GT HM 4		NOTES
			MD	TD	
STRENGTH AT 0.5% STRAIN	ISO 10319	kN/m	6.5	7.5	a,b,c,d
STRENGTH AT 2% STRAIN	ISO 10319	kN/m	16.0	17.5	a,b,c,d
RESISTANCE TO CHEMICAL DEGRADATION	EN 14030	%	100		b
RESISTANCE TO WEATHERING	EN 12224	%	100		b

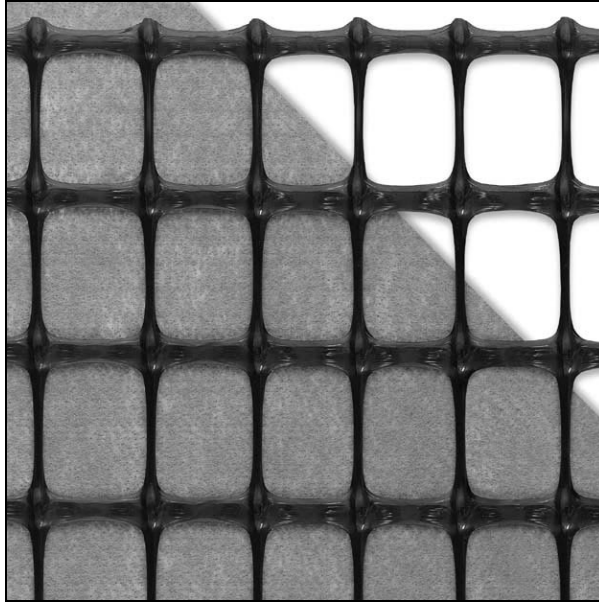
GEOTEXTILE PHYSICAL CHARACTERISTICS	TEST METHOD	UNIT	DATA	NOTES
MASS PER UNIT AREA	ISO 9864	g/m <sup>2</sup>	150	a
OPENING SIZE	ISO 12956	µm	75	a

#### NOTES:

- Tensile Tolerance: ± 1 kN/m
- Typical values
- Tests performed using extensometers
- MD: machine direction (longitudinal to the roll); TD: transverse direction (across roll width)
- Aperture Tolerance: ± 3mm



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The TENAX Laboratory has been operational since 1980 and has been continuously improved with the purpose of assuring unequalled 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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