

TENAX GNT

Type: **1000**
Geonets



TENAX **GNT** geonets are high profile mesh structures made by three sets of overlaid intersecting strands. The inner strands, thicker and heavier, provide high compressive resistance and transmissivity. The intersecting strands form overlaid sets of continuous deep channels which provide high flow capacity. These geonets are used in waste disposal and civil engineering projects, where a high hydraulic flow capacity is required.

TENAX **GNT** geonets are manufactured from extrusion of High Density Polyethylene (HDPE), black in color; they are inert to chemical and biological conditions normally occurring in soil. Moreover they are treated with special additives to resist UV degradation. TENAX **GNT** geonets are available in a wide range of thicknesses and widths, so as to satisfy any design and installation need.

Typical applications

Load distribution, site leveling and mechanical protection of the geomembrane; drainage of the accidental leaks below primary; leachate and rain water collection above primary geomembrane; mechanical protection of the geomembranes when in contact with waste-materials and/or soil; drainage of liquids and gases present in the soil above and/or below the capping geomembrane.

PHYSICAL CHARACTERISTICS	TEST METHOD	UNIT	GNT 1000	NOTES
STRUCTURE			3 ribs	
POLYMER			HDPE	
U.V. STABILIZER			carbon black	
FOAMING AGENT			NO	

DIMENSIONAL CHARACTERISTICS	TEST METHOD	UNIT	GNT 1000	NOTES
THICKNESS at 20 kPa	ISO 9863	mm	6.0	a
THICKNESS at 200 kPa	ISO 9863	mm	5.8	a
MASS PER UNIT AREA	ISO 9864	g/m ²	1000	a
ROLL WIDTH		m	2.05	a,d
ROLL LENGTH		m	25.0	a
ROLL DIAMETER		m	0.47	a
ROLL VOLUME		m ³	0.45	a
ROLL WEIGHT		kg	51.3	a

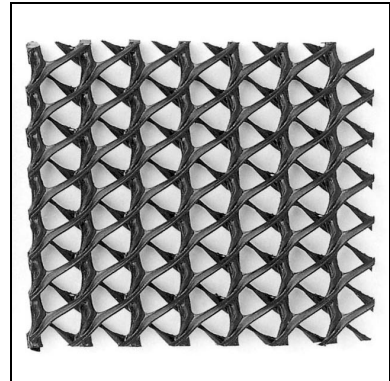
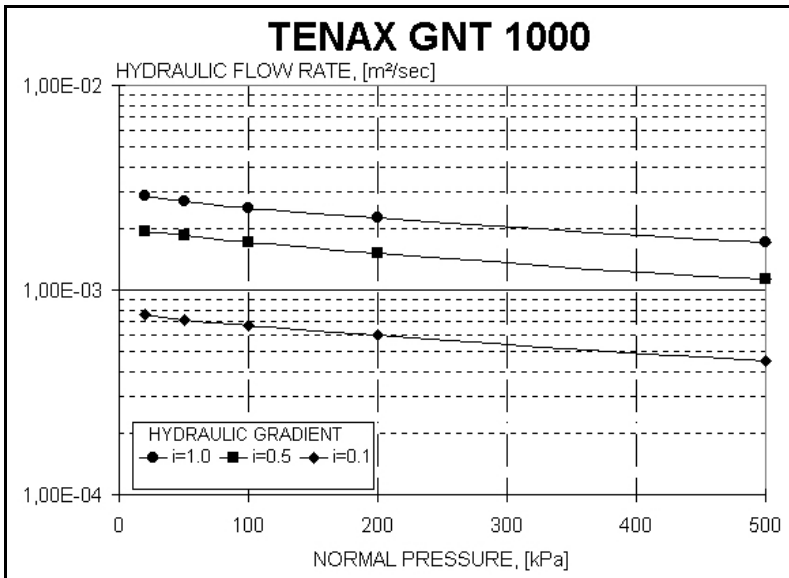
TECHNICAL CHARACTERISTICS	TEST METHOD	UNIT	GNT 1000	NOTES
HYDRAULIC FLOW RATE				
i=1 $\sigma_v = 20$ kPa	ISO 12958	m ² /s	2.20E-03	a,b,c
i=1 $\sigma_v = 100$ kPa	ISO 12958	m ² /s	2.00E-03	a,b,c
i=1 $\sigma_v = 200$ kPa	ISO 12958	m ² /s	1.80E-03	a,b,c
i=1 $\sigma_v = 500$ kPa	ISO 12958	m ² /s	1.30E-03	a,b,c
TENSILE STRENGTH	ISO 10319	kN/m	10	a,b
ELONGATION AT PEAK	ISO 10319	%	20	a,b

NOTES:

- a) Typical values
- b) Longitudinal direction
- c) 2mm HDPE linear boundary condition
- d) Upon request available 3.8 m wide



Typical Hydraulic Characteristics



0799-CPD-25



The TENAX Laboratory has been created in 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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