TENAX **HD**

Type: 301 – 302

Geocomposite High Drainage

TENAX **HD** geocomposite high drainage have an inner core composed of a 3D high profile quadrangular shaped mesh structures made by three sets of overlaid intersecting strands and a combination of one (**HD 301**) or two (**HD 302**) nonwoven geotextiles.
The combination of geotextiles (filtering action) and geonet (drainage and protection) offers a complete system of "filter-drainage-protection".
The inner strands, thicker and heavier, provide high compressive resistance and transmissivity. These geonets are used in waste disposal and civil engineering projects, where a high hydraulic flow capacity is required. Moreover they are treated with special additives to resist UV degradation.

Typical applications

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	HD 301 – 302	NOTES
GEONET POLYMER			PP	
GEOTEXTILE POLYMER			PP	
U.V. STABILIZER			carbon black	

DIMENSIONAL CHARACTERISTICS	TEST METHOD	UNIT	HD 301 – 302	NOTES
UNIT WEIGHT	ISO 9864	g/m²	> 400	a
THCKNESS at 20 kPa	ISO 9863	mm	5.5	d
ROLL WIDTH		m	4.00	a
ROLL LENGTH		m	50.0	a,f

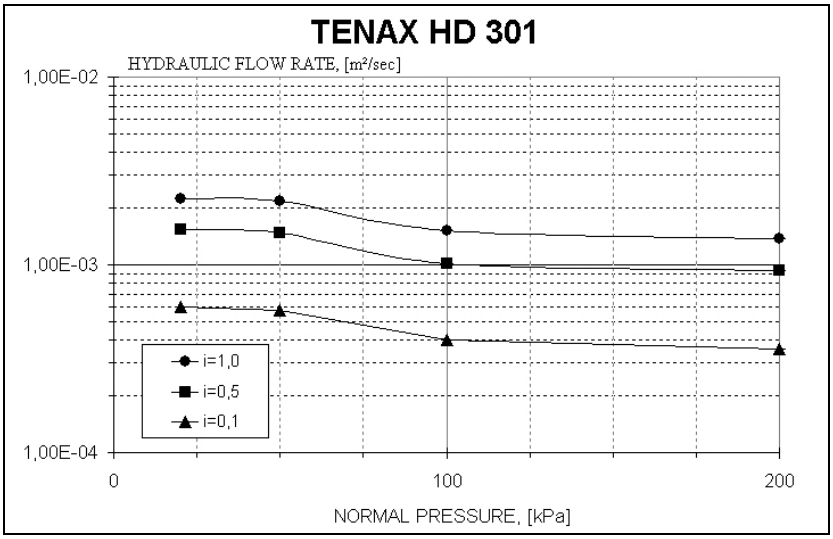
TECHNICAL CHARACTERISTICS	TEST METHOD	UNIT	HD 301	HD 302	NOTES
HYDRAULIC FLOW RATE					
i=1.0 σv = 20 kPa	ISO 12958	m²/s	2.30E-03	2.20E-03	b,c,d
i=1.0 σv = 100 kPa	ISO 12958	m²/s	1.50E-03	1.40E-03	b,c,d
i=1.0 σv = 200 kPa	ISO 12958	m²/s	1.40E-03	1.30E-03	b,c,d
i=1.0 σv = 500 kPa	ISO 12958	m²/s	1.25E-03	1.15E-03	b,c,d
TENSILE STRENGTH	ISO 10319	kN/m	8.5	17	b,d
ELONGATION AT PEAK	ISO 10319	%	50	50	a,b

GEOTEXTILE CHARACTERISTICS	TEST METHOD	UNIT	HD 301 – 302	NOTES
OPENING SIZE	ISO 12956	mm	0,08	a,e

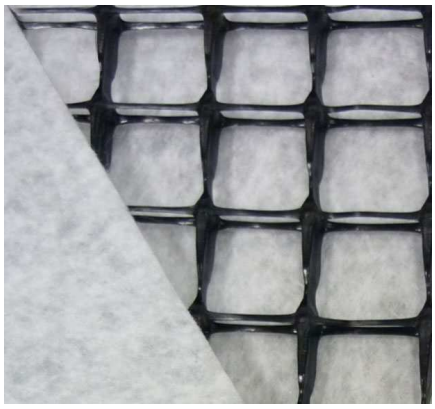
NOTES:

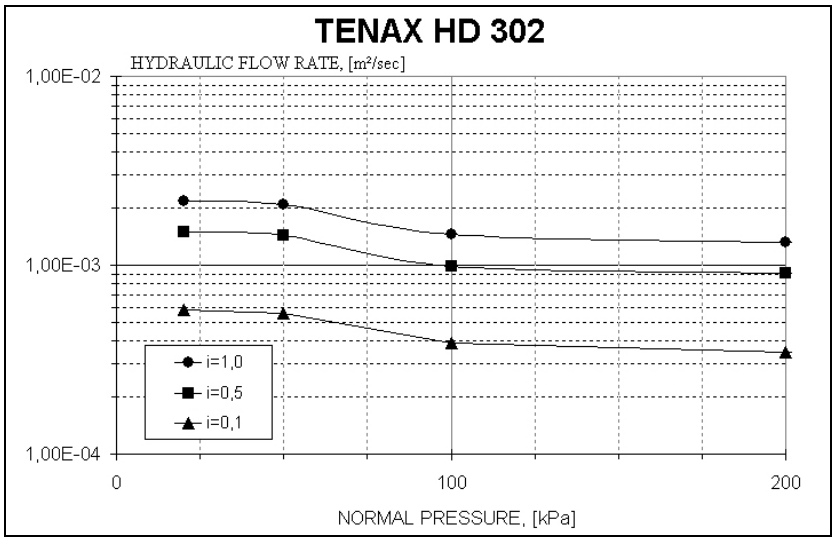
a) Typical Value
b) Longitudinal Direction
c) 2mm HDPE liner boundary condition
d) Tollerance: -10%
e) Tollerance: ±0.03
f) Other roll length on demand

Typical Hydraulic Characteristics



TENAX HD





Geonet Core Drainage
"Box-net"

0799-CPR-25

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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