

## GEOLAND HT 400

GEOLAND HT is a high tenacity non-woven needle punctured on both sides made of 100% virgin and high tenacity polypropylene short fibres. Available in white, they are thermally treated and then chilled by calendar.

CIVILROCK attaches the highest importance to the quality of its products and operate a quality assurance system according to ISO 9001 AENOR certificate.

### ADVANTAGES

- High tenacity
- High resistance to alkalinity and inert towards the various chemical elements present in the soil.
- High puncture resistance.
- Possibility of roll widths up to 6.6 m and length on request.
- Service life of more than 25 years in expected in soils with  $4 < \text{pH} < 9$  and a temperature less than 25°C



### APPLICATION

GEOLAND HT is a range of non-woven needle punched geotextiles made of 100% polypropylene high tenacity fibres used for of road construction projects, tunnels, foundations and hydraulics with the following functions:

**Separation:** To prevent the transfer of particles between different layers. It prevents the contact between non compatible materials. It acts as a non-permeable barrier between soils of different structures.

**Protection:** It provides puncture resistance to waterproofing membranes.

**Filtration and drainage:** Transversal permeability allows the passage of the water through the material whilst retaining small particles.

GEOLAND HT is loose laid without tension and must be free from folds and wrinkles; place in direct contact with the ground avoiding any gaps or voids between the substrate and the geotextile.

Continuity between sheets is maintained by simple overlap, seams or thermo-welding.

The composition of 100% polypropylene fibres allows the use of GEOLAND HT geotextile on projects where they are to be subjected to with alkaline environments.

### REGULATIONS

GEOLAND HT are produced in our factory in Cervera (Lleida, Spain) with CE marked certificate n° 0099-CPR-A42-0101 and 0099-CPR-142-0102 in conformity of EN 13249:2001, EN 13250:2001, EN 13251:2001, EN 13252:2001, EN 13253:2001, EN 13254:2001, EN 13255:2001, EN 13256:2001, EN 13257:2001 and EN 13265:2001.

### Geotextiles Polypropylene

TEXSA SYSTEMS SLU reserves the right to modify the information contained herein without prior notice and declines all liability in cases of errors produced due to inappropriate use of the product. The values shown in the technical sheet are the mean values from tests in our lab.

## PACKAGING AND STORAGE

Width (m) 2.2 / 3.3 / 6.6

Other weights and dimensions on request

Production Standard Width 2.2 m	GEOLAND HT 120	GEOLAND HT 150	GEOLAND HT 200	GEOLAND HT 300	GEOLAND HT 400	GEOLAND HT 500	GEOLAND HT 700	GEOLAND HT 800
Length (m)	125	125	100	65	55	50	50	50
Number of rolls on each pallet	9	9	9	9	9	9	4	4
Roll Weight (kg)	33	42	44	43	49	55	77	88

Storage: Must be store on its original packaging in a dry environment and preferably protected from the weathering until installed

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## TECHNICAL PROPERTIES

	Standard	GEOLAND HT 120	GEOLAND HT 150	GEOLAND HT 200	GEOLAND HT 300	GEOLAND HT 400	GEOLAND HT 500	GEOLAND HT 700	GEOLAND HT 800
Thickness at 2 kPa load (mm)	EN ISO 9863-1	1.1	1.2	1.5	2.3	2.8	3.3	4.6	5.5
Tensile Strength									
DM (kN/m)	EN ISO 10319	8.2	11	14.5	22	29.5	35	48	54
DT (kN/m)	EN ISO 10319	10.5	13	18	26.5	36.5	46	65	75
Elongation									
DM (%)	EN ISO 10319	56	58	60	64	68	75	100	120
DT (%)	EN ISO 10319	64	65	66	71	74	80	110	130
Static Puncture Resistance (CBR) (N)	EN ISO 12236	1 585	1 900	2 900	4 300	6 150	7 900	11 000	13 000
Dynamic Puncture Resistance (mm)	EN ISO 13433	25	22	13	7	2			
Opening size (µm)	EN ISO 12956	90	85	80	75	65	61	57	54
Water permeability (m/s)	EN ISO 11058	95*10-3	90*10-3	71*10-3	62*10-3	60*10-3	60*10-3	58*10-3	52*10-3
Durability	EN ISO 12226	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C	> 25 years in a natural soil 4<ph<9 at T<25°C
Durability	EN ISO 12224	To be covered within 1 month after installation	To be covered within 1 month after installation	To be covered within 1 month after installation	To be covered within 1 month after installation	To be covered within 1 month after installation	To be covered within 1 month after installation	To be covered within 1 month after installation	To be covered within 1 month after installation

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