

PRODUCT CUT SHEET



TEXEL GEO-9

REINFORCING GEOCOMPOSITE FOR SOIL WITH LOW BEARING CAPACITY

+ ADVANTAGES:

A single product for efficiency of reinforcement, separation and filtering;

Due to its drainage properties, helps accelerate consolidation of foundation soil;

Avoids equipment getting bogged down in soft soils;

Reduces costs and social impact of work due to reduction of embankments.

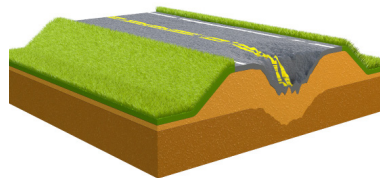


THE PROBLEM

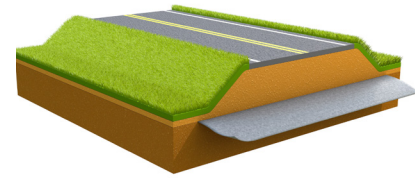


THE SOLUTION

Texel Geo-9 is a reinforcing geocomposite made of 100 % polypropylene resulting from the combination by needling of two geotextiles (one non-woven and one woven). This product combines properties of these two technologies, optimizing reinforcement, separation, filtration and drainage performance thanks to its versatility this product is an excellent solution for unusually soft infrastructure soils as well as for difficult worksite conditions.



WITHOUT TEXEL GEO-9



WITH TEXEL GEO-9

FUNCTIONS



PROTECTION



DRAINAGE



REINFORCEMENT



FILTRATION



SEPARATION



WATERPROOFING

SECTORS

- ✓ Municipal and Landscape Architecture
- ✓ Roads and Transportation
- ✓ Natural Resources and Energy
- ✓ Industrial and Waste Management

A REINFORCEMENT SOLUTION PROVIDING GREAT USE BENEFITS:

- Reinforcement of soft infrastructure soils;
- Preservation of subfoundation integration;
- Control of backfill volume;
- Minimizes rutting and shearing risk from repeated heavy vehicle traffic.

Using Texel Geo-9 also simplifies access to the worksite and prevents the bogging down of machinery under difficult conditions :

- Soft infrastructure soils;
- Work during periods of thawing or heavy rain;
- Soils saturated by high ground water;
- Naturally humid location.

TEXEL GEO-9



ROBUST DESIGN FOR DEMANDING APPLICATIONS:

- The improvement in bearing capacity Texel Geo-9 provides can be measured with the computation tool Texel has developed;
- Using Texel Geo-9 generates substantial savings of both time and money both in clearing and embankment construction;
- For environmentally conscious designs, Texel Geo-9 generates substantial carbon dioxide savings;
- Request the bearing capacity, financial assessment and environmental assessment computation tools.

TEXEL GEO-9, A PRODUCT WHICH IMPROVES MECHANICAL AND HYDRAULIC PROPERTIES OF SOILS

Reinforcement and separation/filtration properties are fundamental with low-bearing-capacity soils (rearranged, not consolidated and saturated).

- **Reinforcement and separation:** Reinforcement is ensured by the high-elastic-modulus woven geotextile. Like a tensile membrane, it binds with the soil to balance out the difference between the stress coming from the road and the stress the soil can take. Its tensile modulus allows it to distribute loads over a greater surface. Texel Geo-9 ensures separation of the various material layers and allows them at all times to preserve their particular mechanical properties.
- **Filtration and drainage:** Texel Geo-9's filtration function is ensured by its small filter opening size. These hydraulic properties enable it as well to accelerate consolidation of soil prone to attenuation. Its drainage capacity increases its adherence with the soil by reducing this self-same attenuation. Texel Geo-9's filter opening size, optimized for soils with a high level of fine particulate matter, offers yet another advantage under these conditions.

It offers solutions in specific situations where the properties of conventional geotextiles are insufficient for infrastructure reinforcement. Texel Geo-9 is ideal for city roads, forestry roads and parking lots with silty, clayey soils, even peatlands.

SPECIFICATIONS MTQ / BNQ GRADE	Description	Type of product	Format
	Texel Geo-9 (R1 & R2)	Polypropylene needle-punched non-woven/woven geocomposite	Roll

TEXEL GEO-9, PROPERTIES WHICH MAKE A DIFFERENCE

Properties Measured		Test Method	Unit	Interpretation
Mechanical	CBR puncture	ASTM D6241	N	Indicates the geotextile's resistance to puncture.
	Wide width tensile strength at 5%	ASTM D4595	kN/m	Indicates the geotextile's capacity to absorb tensile force and resistance to rutting.
	Wide width tensile strength at break	ASTM D4595	kN/m	Indicates the geotextile's capacity to absorb tearing tensile force for reinforcement applications.
Hydraulic	Filter opening size (FOS)	ONGC 148.1-10	µm	Indicates the size of particulate matter that can pass through the geotextile under hydrodynamic conditions.
	Transmissivity	ASTM D6574	m ² /s	Indicates the capacity of the geocomposite to conduct water along its plane for a given constraint and hydraulic gradient.

This table presents a summary of specifications. We invite you to consult updated information sheets and detailed technical specifications on our website at www.texel.ca.

NEED TO KNOW MORE?

Call our representatives for your projects! 1 800 463-8929 | texel.ca

1300, 2^e rue, Parc industriel, Sainte-Marie-de-Beauce (Québec) G6E 1G8

IMPORTANT NOTICE - The information included in this document is presented for status and promotion purposes only. Therefore, all the characteristics of the project have not been mentioned. Texel and his partners do not offer any guarantee in regard to the previous information.

