PRODUCT CUT SHEET

SX SERIES

REINFORCEMENT AND FILTRATION SOLUTIONS

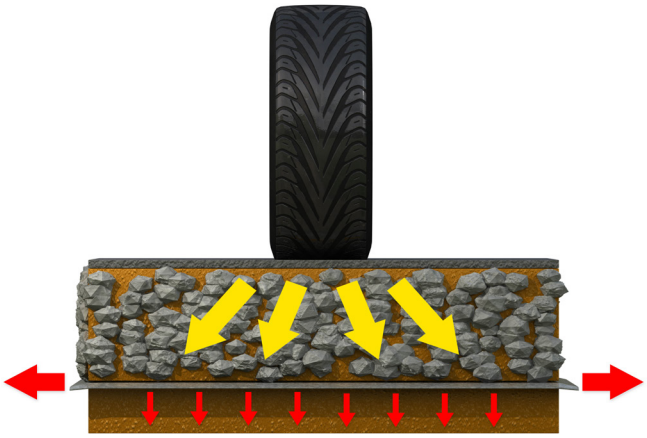
ADVANTAGES:

Woven geotextiles designed for reinforcement;

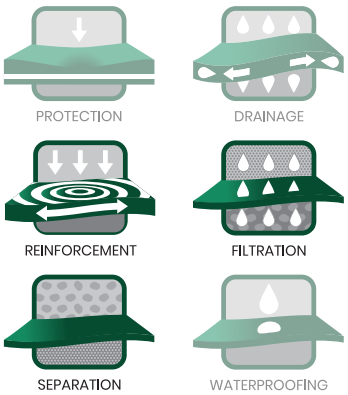
Woven geotextiles optimized for filtration;

Cost-effective solution
Easy to install on-site.

The SX Series includes several woven geotextiles with different manufacturing processes. These geotextiles are specially designed to perform the function of reinforcement, filtration, or a combination of reinforcement and filtration, under structures with high mechanical loads. Due to their specific manufacturing process, woven geotextiles have high mechanical strength, low elongation and filtration capacity to limit the development of rutting in reinforcement and filtration applications.



FUNCTIONS



SECTORS

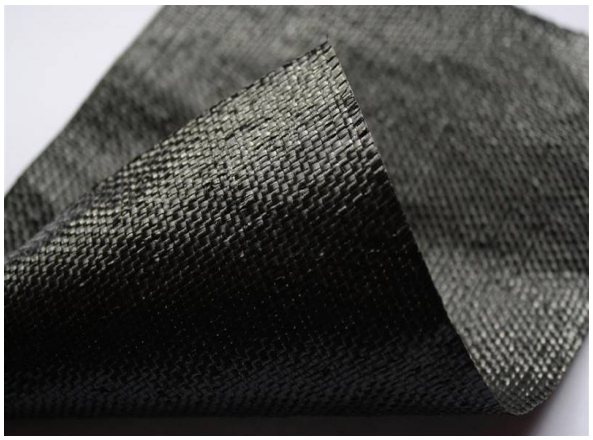
- Municipal and Landscape Architecture
- Roads and Transportation
- Natural Resources and Energy

WOVEN GEOTEXTILES, SOLUTIONS FOR FINE-GRAINED SOILS WITH LOW LOAD-BEARING CAPACITY

Woven geotextiles are designed to reinforce and filter soft and clay soils. Several applications require reinforcement and filtration under these conditions:

- Parking and various platforms;
- Paved or unpaved roads;
- Backfill work.

SX SERIES



TEXEL OFFERS THREE SERIES OF WOVEN GEOTEXTILES TO MEET SPECIFIC APPLICATIONS AND NEEDS

- **SX-Reinforcement 1 Series:** This series provides a standard reinforcement for roads and parking lots on soft ground;
- **SX-Reinforcement 2 Series:** This series is characterized by its hydraulic properties and superior mechanical resistance compared to the SX-Reinforcement 1 series, which significantly increases the load-bearing capacity of fine-grained soils;
- **SX-Filtration Series:** This series includes versatile woven geotextiles with physical, mechanical and hydraulic properties optimized for filtration applications.

THE SX SERIES, SOLUTIONS FOR THE REINFORCEMENT AND FILTRATION OF STRUCTURES

prevent the migration of fine particles into the infrastructure layer. Three mechanisms are used at the same time to strengthen the soil and prevent permanent deformation:

- **Filtration and containment:** under the effect of the passage of the load, the geotextile partially prevents the downward movement of the aggregate layer and the upward movement of the supporting soil thanks to the physical, mechanical and hydraulic properties optimized for the filtration of fine and clay soils. This reduces the compressive force applied to the infrastructure soil under the geotextile;
- **Membrane effect:** with the soil bearing a perpendicular load, the geotextile acts as a membrane under tension to spread part of the load and transfer it to the geotextile's horizontal plane, thus reducing the vertical load transmitted to the infrastructure soil;
- **Localized reinforcement:** loads applied to highly-angular stone can cause localized rupture of the supporting soil. Woven geotextiles, having a high initial elongation modulus, control this effect by avoiding punctures and by limiting movement of the aggregate.

The high deformation modulus of woven geotextiles allows this type of product to transfer initial loads without deformation and thus provide optimal reinforcement. Woven geotextiles have advantages such as low cost, high tensile strength and low extensibility.

SPECIFICATIONS	**Description**	**Type of product**	**Format**
	SX-Reinforcement 1 Series, SX-Reinforcement 2 Series, SX-Filtration Series	Woven slit-film geotextile, woven monofilament geotextile	Roll

SX SERIES, PROPERTIES THAT MAKE THE DIFFERENCE

Properties Measured		Test Method	Unit	Interpretation
Mechanical	Elongation	ASTM D4632	%	Quantifies the elongation the product can accept before breaking.
	Tensile strength	ASTM D4632 ASTM D4595	N	Indicates the geotextile's capacity to absorb tension before reaching its breaking point.
	CBR puncture	ASTM D6241	N	Quantifies the product's capacity to resist to perforation from aggregates pressed against the geotextile.
Hydraulic	Apparent Opening Size (AOS)	ASTM D4751	µm	Indicates the size of soil particles that can pass through the geotextile in static conditions.
	Water flow rate	ASTM D4491	L/min/m²	Quantifies the maximum amount of water that can be evacuated by one square meter of the product in one minute.

This table presents a summary of specifications. We invite you to consult updated data sheets and detailled technical specifications on our web site at **www.texel.ca.**

NEED TO KNOW MORE?

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