## **PRODUCT CUT SHEET**



# **E SERIES**

### PRODUCTS OPTIMIZED FOR PROTECTION AGAINST PUNCTURE

## • ADVANTAGES:

High resistance to mechanical stress;

Guaranteed weight and thickness;

Detailed quality control certificates available on request;

Available in made-tomeasure widths up to 17' 3".



The E Series brings together geotextiles products which, through their physical, mechanical and hydraulic properties, optimizes the protection and drainage functions. These geotextiles are commonly used for environmental applications such as waterproofing geomembrane protection and for slopes, dykes and embankment protection. In containment applications, Texel E Series properties allow to substitute the sand and act as a local stress reduction layer to prevent or reduce the potential damage that could suffer another material layer.

### **FUNCTIONS**





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





GEOTEXTILES E SERIES

### GEOTEXTILES USED FOR ROCK FILL ARE EXPOSED TO SIGNIFICANT MECHANICAL STRESS AND CALL FOR THE PROPERTIES OF TEXEL E SERIES:

- Mechanical resistance to punching caused by rocks and blocks;
- Resistance to UV rays for exposed fabric;
- Adequate permeability for soil drainage;
- Separates and filters in order to ensure protection against erosion.



# E SERIES





### FOR ALL TYPE OF PROTECTION

- In geomembrane protection applications, the Texel E Series properties help to avoid perforation during backfill operations;
- In slope, dyke and embankment protection applications, the Texel E Series properties help to preserve the integrity of the soil in place while allowing fluids flow.

### **E SERIES GIVES YOU MAXIMUM PROTECTION**

When geomembranes are used for a waterproof seal, the design must anticipate angular base or fill materials that can puncture the geomembrane. Protective geotextiles should therefore be used in order to provide a necessary cushion and protection for the geomembrane from potential perforations. Certain design methods for protective layers are recognised by the industry and take several important factors into consideration :

- Type and angularity of the support soil and/or fill;
- Type and thickness of the geomembrane to be protected;
- Type of material to be contained (angularity, toxicity, chemical composition, etc.);
- Pressure applied by material against the geomembrane (density, compaction, depth, etc.).

In addition to these constraints, an adequate protection takes into account certain physical, mechanical and hydraulic characteristics as :

- · Polymers offer resistance to chemical and biological damage;
- Weight and thickness influence the cushioning and reduction of the concentration of applied force;
- · Mechanical resistance is the resistance to breakage during the installation and under the load;
- · Hydraulic capacities refer to the drainage capacity and the permeability.

NOTE : The most extreme conditions of mechanical stress often occur during the construction phase of a project (machinery, manipulation, traffic, fill, etc). For this reason, planning this sort of project should always take the entire life cycle of the project into consideration.

	Description	Type of product	Format
SPECIFICATIONS	TEXEL: 040E, 060E, 080E, 100E, 120E, 140E, 160E, 200E, 240E, 280E, 320E, 400E	Needlepunched nonwoven geotextile	Roll

### **E SERIES, SPECIFICATIONS THAT MAKE A DIFFERENCE**

Properties Measured		Test Methos	Unit	Interpretation
Mechanical	Minimum Weight	ASTM D5261	g/m² (oz/yd²)	Measures the material's density in order to evaluate its protective capacity.
	Thickness	ASTM D5199	mm	Indicates the geotextile's thickness relative to its protective capacity.
	Tensile Strength	ASTM D4632	Ν	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 perforation from aggregates pressed against the geotextile.

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! 1800 463-8929 | texel.ca

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