PRODUCT INFORMATION SHEET

UX SERIES

SOLUTION FOR WALL AND SLOPE REINFORCEMENT

BENEFITS:

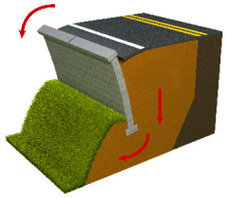
Allows construction of walls or slopes with angles up to 90°;

Effective with almost all types of backfill materials;

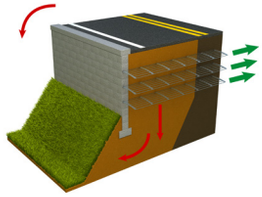
Ensures retention of very high loads over a long period;

Long-term resistance to chemical, biological, and installation-related degradation.

UX Series geogrids are manufactured from high-density polyethylene (HDPE) resin and are inert to most chemical and biological conditions found in soils, ensuring long-lasting performance. Their design features strong orientation along one axis, providing maximum tensile strength under sustained high loads. This type of geogrid is ideal for constructing reinforced walls and slopes (MSE and RSS) with angles up to 90°.

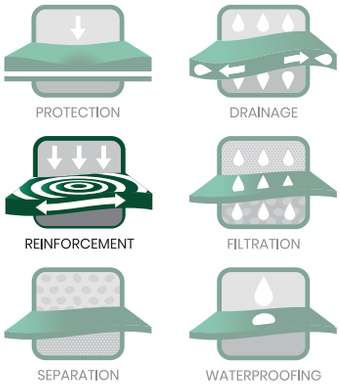


WITHOUT GEOGRID



WITH GEOGRID

FUNCTIONS



SECTORS

- Municipal and Architectural
- Roads and Transportation
- Natural Resources and Energy
- Industrial and Waste Management

SOIL REINFORCEMENT USEFUL IN VARIOUS APPLICATIONS

Uniaxial geogrids are used for soil reinforcement in permanent or temporary walls and steep slopes, including in the construction of:

- Walls for soil stabilization and retention;
- Architectural and decorative retaining walls;
- Noise barrier walls;
- Temporary walls during construction work;
- Bridge abutments;
- Dikes and dams;
- Various embankments and slopes.

UX SERIES

SIERRASCAPE REINFORCED WALL SYSTEM

The SierraScape system combines the mechanical strength of Texel UX geogrids with the retention capacity of metal cages. These two elements, connected mechanically, provide a reliable and cost-effective solution for projects on sites with significant elevation changes.

This type of reinforced wall is versatile, available in various angles, and can be finished with rock facing or vegetated facades according to your application needs.

UNIAXIAL GEOGRIDS: A SOLUTION FOR LONG-LASTING RETAINING WALLS

The structure of uniaxial geogrids naturally traps aggregates from backfill materials within their openings. This integration consolidates the geogrid and soil into a nearly homogeneous block that supports all loads applied by the wall face. Mechanically attached to the wall facade by various means, the geogrids transfer forces from the wall to the compacted soil behind it. Their uniaxial design allows them to withstand high tensile loads applied in one direction and resist stresses that could affect the structure's stability.

Four main mechanisms can act alone or together to affect the stability of the structure :

- Base sliding;
- Rotational overturning;
- Insufficient bearing capacity;
- Insufficient overall stability of the structure.

The use of uniaxial geogrids behind the wall face allows the strength of the compacted backfill to be mobilized to increase the stability of the structure and its resistance to external forces acting upon it. This type of design can be used with various types of facing: concrete blocks, concrete panels, gabions, timber beams, or other soil retention elements.

SPECIFICATIONS	**Description**	**Product Type**	**Format**
	UX Series	Uniaxial Polypropylene Geogrid	Roll

UX GEOGRID — THE PROPERTIES THAT MAKE THE DIFFERENCE

Measured Properties		Test Method	Unit	Interpretation
Mechanical	Tensile Strength	ASTM D6637-10	kN/m	Indicates the product's resistance to tension.
	Junction Strength	ASTM D6241	kN/m	Indicates the strength of the product's junction points.
Hydraulic	Flexural Stiffness	ASTM D7748-12	mg-cm	Indicates the product's tensile resistance when subjected to bending.
	UV Resistance	ASTM D4355-05	%	Indicates the product's resistance to UV rays.

This table provides a summary of specifications. All users are encouraged to consult the detailed, up-to-date product technical sheet on our website at www.texel.ca.

WANT TO LEARN MORE?

Feel free to contact one of our representatives to discuss your project. **1 800 463-8929 | texel.ca**

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