

# Geoconduct

# Geotextiles

Conductive geosynthetic for leak detection in geomembranes through Geoelectric monitoring





# Product Information

Global Synthetics Geoconduct is a line of patented geotextiles providing conduction and mechanical protection in the form of a current conducting grid combined with one or several non-woven needled geotextiles. The characteristics of the geotextiles used are validated for each project based on the mechanical constraints of the site and the desired level of protection. Global Synthetics Geoconduct can be installed under or between two geomembranes. Under a geomembrane, it is possible to disregard the type of support while between two membranes, it provides for the monitoring of primary tightness without flooding the structure.

# Advantages

- Leak monitoring by geoelectric means regardless of the type of support.
- Uniform diffusion of electrical signals under geomembrane.
- Geomembrane protection against punctures.
- Also avalible in a drainage composite form.

# **GEOCONDUCT**

# Solution Scalable To Your Needs

The Global Synthetics Geoconduct line combines geotextiles and an electroconductive media in a single product which can be dimensioned according to the specific requirements of your project:

- Protection: puncture resistance according to geotextiles selected
- **Electrical conductivity:** electrical conductivity ensured by the presence of a conducting structure.
- **Period of use:** can be limited to the installation period or allow for ongoing monitoring over several years.
- **Drainage:** the Geoconduct technology can be combined with Draintube for drainage applications.

# Sectors

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

# PROTECTION DRAINAGE REINFORCEMENT FILTRATION SEPARATION WATERPROOFING

# Worksite Assistance To Help You With Installation:

- Technical assistance is provided at the start of a project at the request of the engineer or the company.
- An installation guide is provided to explain the execution of joints to allow electrical conduction between rolls.
- A control box is made available during the installation of Geoconduct to monitor electrical continuity of joints between rolls.





# **GEOCONDUCT**

# **Geoconduct, A Solution To Your Leak Detection Needs**

Global Synthetic Geoconduct was specifically designed for the detection of leaks in a geomembrane laid on a non conductive base (concrete, insulation, sand, etc.) and is compatible with all types of geomembranes (PEHD, bituminous, PVC, etc.). Geoconduct provides for the monitoring of leaks in a geomembrane in various sealing applications:

- Landfill sites (technical);
- Holding ponds (water, leachate, chemicals, etc.);
- Drinking water reservoir.

For each project, the Geoconduct line is adaptable to the desired performance level:

- Monitoring of leaks in both primary and secondary geomembranes when installing double sealing.
- Geoelectric prospection of leaks in membrane, covered or not, during work with any type of mobile device (water jet, electrical broom, electrical dipole, etc.).
- Possible monitoring during the entire life of the works in addition to a fixed system of ongoing leak detection.



## **Specifications**

Description	Type of product	Format
Global Synthetic Geoconduct	Polypropylene needle-punched non-woven/woven geocomposite	Roll

## **Geoconduct, Properties Which Make A Difference**

Properties Measured		Test Method	Unit	Interpretation
Mechanical	CBR puncture	AS3706.4	N	Quantifies the puncture resistance to aggregate pressing against the geocomposite.
Hydraulic	Permeability	AS3706.9	l/m2/s	Indicates the capacity of the geotextile filter to let water through perpendicularly to its plane.
Electrical	Average electrical resistance	-	Ohm.m	Indicates the capacity of the geocomposite to conduct current over a large surface.
	Response time to water spray	-	sec	Indicates the capacity of the geocomposite to allow detection at a given sweeping speed.

This table presents a summary of specifications. We invite you to consult updated information sheets and detailed technical specifications on our website at globalsynthetics.com.au

# **About Us**

# **Leaders in Geosynthetics**

Global Synthetics is a 100% Australian-owned company, proud to offer a complete range of high-quality geosynthethic products backed by over 200 years of combined staff experience in the industry.

We have supplied products to some of the largest recent infrastructure works in Australia. Global Synthetics provides major benefits to any geotechnical engineering project with the right products and our technical expertise.

Global Synthetics products are used in the following applications:

- Pavement Stabilisation
- Ground Improvement
- Soil Reinforcement and Retaining Structures
- Water Management
- Drainage Systems & Hydraulic Works
- Landfills
- Coastal Erosion Structures



## Get in Touch

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