



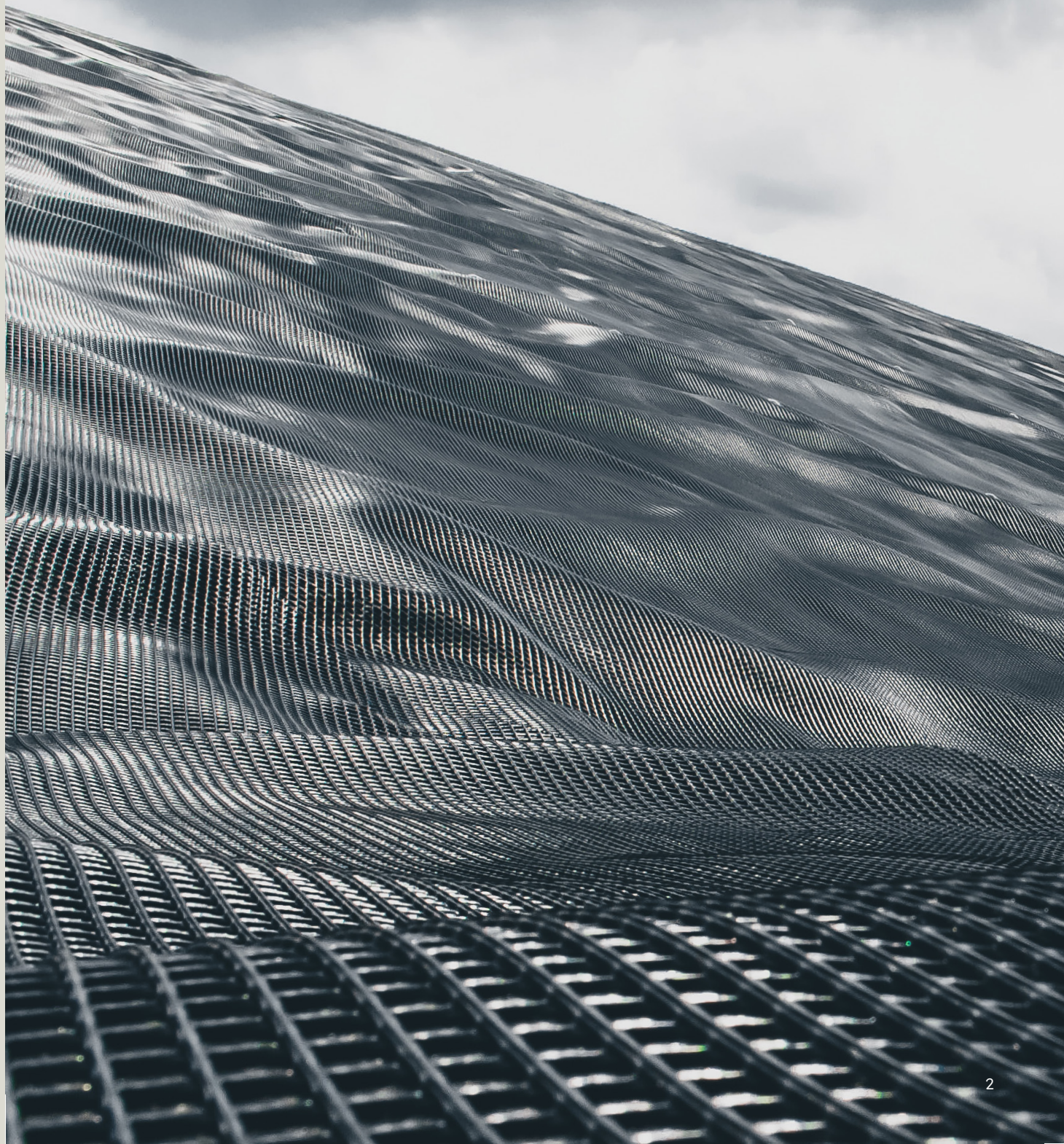
FABRINET GEOSYNTHETIC DRAINAGE SOLUTIONS

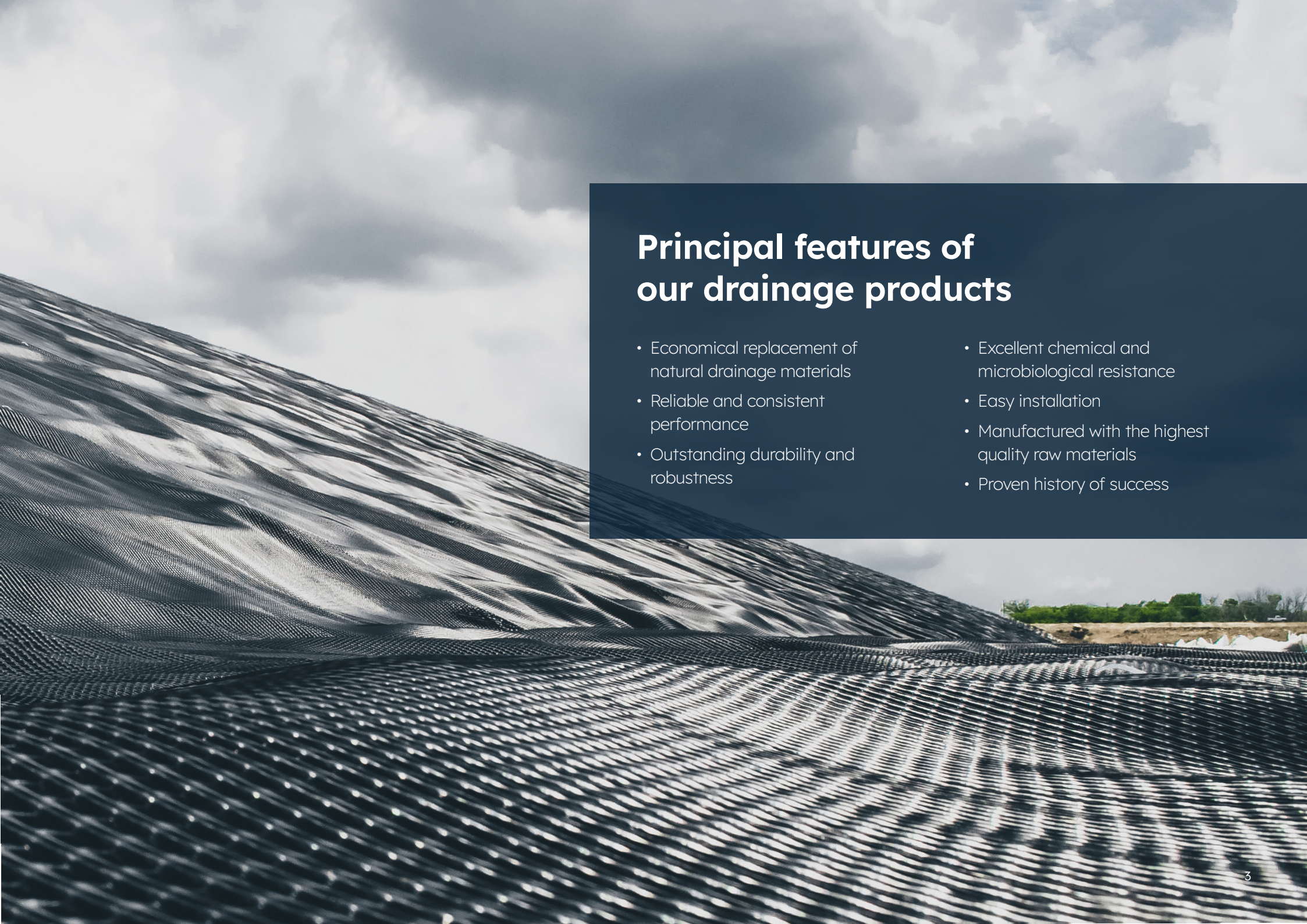


Geosynthetic drainage solutions

Geosynthetic drainage products have been used successfully in environmental and civil engineering applications for several decades. Applications once dominated by natural drainage materials have been replaced by geosynthetic drainage products such as geonets and geocomposites.

Geonets and geocomposites are used in environmental applications such as leak detection, leachate collection and removal systems under high loads, collection and discharge of rainwater and landfill gas in landfill capping systems, as well as in a broad range of applications in civil engineering and building construction sectors.



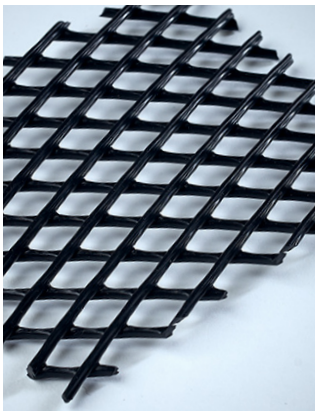


Principal features of our drainage products

- Economical replacement of natural drainage materials
- Reliable and consistent performance
- Outstanding durability and robustness
- Excellent chemical and microbiological resistance
- Easy installation
- Manufactured with the highest quality raw materials
- Proven history of success

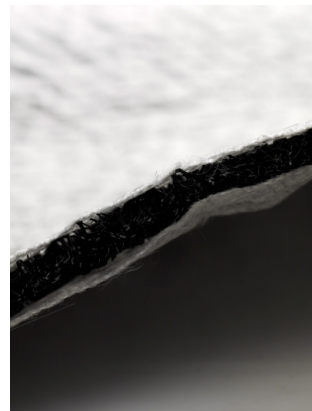


FABRINET drainage solutions



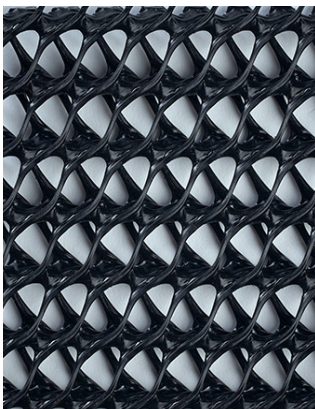
FABRINET BP

FABRINET BP comprises a biplanar core of high-density polyethylene that when combined with one or two layers of polypropylene filter geotextiles, replaces conventional drainage gravel layers and conserves natural resources. The efficient drainage properties of **FABRINET BP**, make it an effective and versatile solution for many applications.



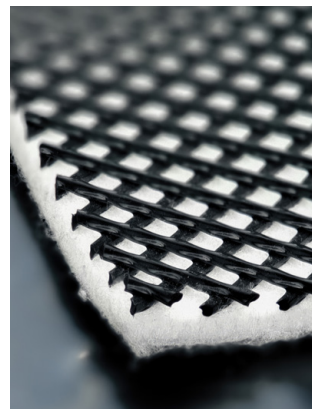
FABRINET Megadrain

FABRINET Megadrain consists of a three-dimensional polypropylene monofilament core combined with one or two layers of polypropylene filter geotextiles. The extremely high filament content provides a high in-plane flow capacity. It is often used for surface drainage applications. **FABRINET Megadrain** replaces conventional gravel drainage layers and conserves natural resources.



FABRINET TP

FABRINET TP consists of a high-density polyethylene triplanar core that provides highly channelized transmissivity. The very low compressibility offers high discharge capacity under high surcharge loads and is used in many drainage applications to replace conventional drainage gravel layers and conserve natural resources. The core can be further combined with one or two layers of polypropylene filter geotextiles.



FABRINET Base Protect

Geomembranes must be protected against damage by coarse objects. **FABRINET Base Protect** is a three-dimensional, multicomponent, load resistant high-quality geocomposite for use as a geosynthetic protection layer in landfill base seals and other applications where a high protection efficiency is required. The geonet, an extruded biplanar high density polyethylene (HDPE) structure as the core, is mechanically bonded on one or both sides with a nonwoven geotextile. The product is available with different geotextile weights and thicknesses of the geonet core.

FABRINET BP



FABRINET BP biplanar HDPE geonets have been developed to provide drainage function over a broad range of anticipated site loads and gradients, to replace thick mineral drainage layers.

The biplanar core structure is ideal for the multidirectional in-plane conveyance of liquids and gases. Fluids are transmitted uniformly under a variety of field conditions.

The design of the core is optimized to maintain maximum flow under compressive loads over the

service life. Designers can be confident that the reduction in drainage performance over time is minimized.

This ensures that the system remain stable and operate efficiently thus minimizing operational and maintenance costs.

Filter geotextiles can be selected according to the project requirements.

Benefits

- Geonet from premium quality HDPE raw material providing outstanding durability and robustness
- Proven long-term resistance to UV radiation and oxidation
- Product performance can be modified to meet project-specific conditions
- High in-plane flow capacity over a broad range of normal loads
- Stable biplanar geonet structure providing high compressive creep performance under overburden loads
- Quality assured consistent performance characteristics enabling professional design
- Enables reliable leak detection in double lining systems in landfill, mining and industrial applications
- Outstanding performance against aggressive chemicals and microbiological resistance

FABRINET TP

FABRINET TP triplanar HDPE geonet cores are engineered to have a high void ratio, which means they have a significant open space within their structure relative to their total volume. This high void ratio provides ample space for water to flow through, preventing water buildup and ensuring effective drainage at high loads.

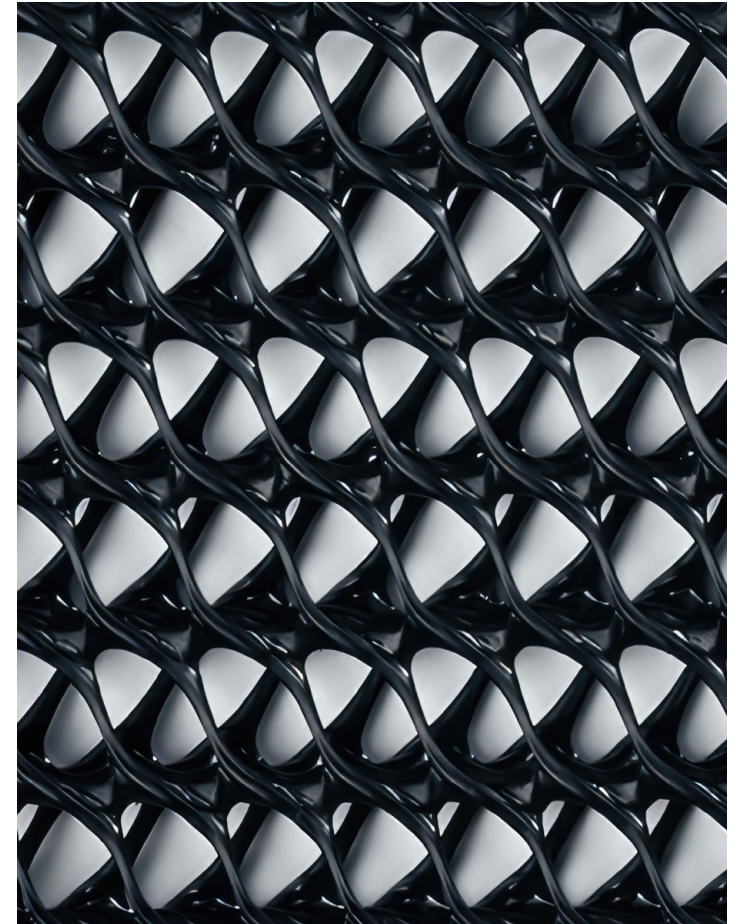
The term “triplanar” refers to the three material strings, the middle one serves as the drainage direction and the outer ones act as spacers.

The triplanar core structure is ideal for the monodirectional in-plane conveyance of liquids and gases over a broad range of anticipated site loads and gradients. The design of the core is optimized to maintain maximum flow under compressive loads over the service life. The combination of high transmissivity and high loads make this product an alternative for a wide range of known applications.

Filter geotextiles can be selected according to the project requirements.

Benefits

- Efficient flow path for liquids and gases – in-plane flow is equivalent or superior to conventional gravel drains or most available drainage cores on the market
- Provides filtration, separation and protection against puncturing of geomembranes
- The triplanar HDPE core and PP geotextiles provide excellent durability properties
- Resistance to all naturally occurring chemical and biological conditions
- Extremely high flow rates in production direction at low inclinations
- Quality assured consistent performance characteristics enable professional design



FABRINET Megadrain



FABRINET Megadrain drainage product range reduces the space required for drainage systems, and thus reduces construction costs. They offer higher flow rates than conventional drainage gravel at a considerably reduced system thickness.

The three-dimensional drainage core grid creates a network of interconnected voids. These voids serve as pathways for water to flow through and are essential for effective drainage.

Due to this extremely high flow rate, **FABRINET** Megadrain drainage products

are suitable for structures with low inclination where large quantities of water need to be drained off.

The three-dimensional polypropylene monofilament core and the polypropylene filter geotextiles offer excellent chemical and biological resistance. Therefore, they can be used in contact with soil and construction materials such as concrete or other geosynthetic products.

Filter geotextiles can be selected according to the project requirements.

Benefits

- Efficient flow path for liquids and gases – in-plane flow is equivalent or superior to conventional gravel drain
- In addition to drainage **FABRINET** Megadrain provides filtration and protection against puncturing of adjacent geomembranes
- The HDPE core and PP geotextiles provide excellent durability properties for covered applications
- Extremely high flow rates at low inclinations
- Lightweight and easy to transport and install
- Availability in large dimensions for environmental applications or small dimensions for distributor needs
- Quality assured consistent performance characteristics enables professional design

FABRINET Base Protect

FABRINET Base Protect is an innovative and sustainable approach to replace conventional thick and heavy nonwoven protection geotextiles with a drain composite that provides superior protection and drainage.

Benefits

- Composite product that provides superior results for protection and drainage
- One product that is suitable for slopes and flat surfaces
- High compressive creep performance to assure long term protection and drainage capabilities



Drainage applications

LANDFILLS

FABRINET BP and **FABRINET** TP typically provide three functions in landfill applications – drainage, filtration and protection – if installed directly on top of the geomembrane. **FABRINET** is resistant to most aggressive liquids and gases. Due to its high shear strength, **FABRINET** can be used on steep side slopes and in capping systems.

Applications

- Leachate collection and removal
- Leak detection
- Surface water collection and removal above the geomembrane layer
- Gas collection below geomembrane layer

MINING

Today's mining practices require optimal performance from any component of the containment lining system.

FABRINET BP or **FABRINET** TP installed between two geomembranes of a double-lining system provides a long-term stable and efficient leak detection layer for solution ponds.

Applications

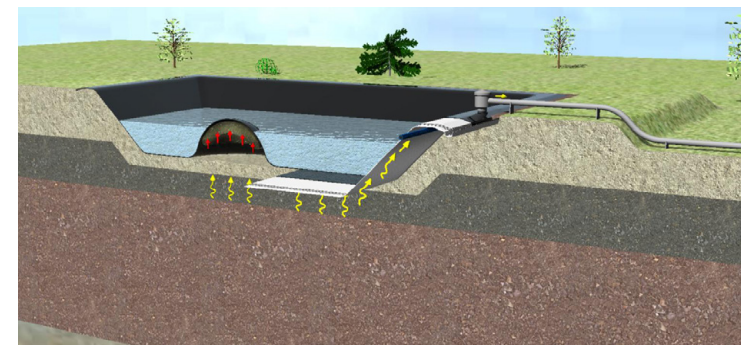
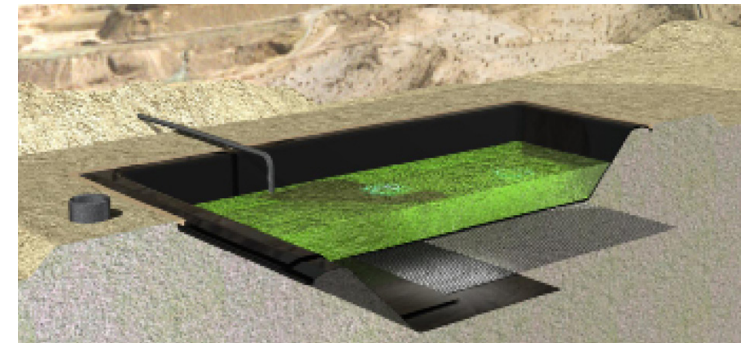
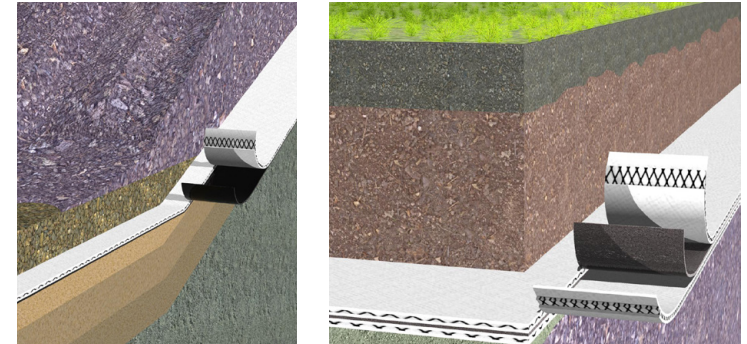
- Collection of pregnant leachate solutions
- Leak detection

WATER CONTAINMENT SYSTEMS AND RESERVOIRS

FABRINET installed below the geomembrane directs subsurface gas towards drainage pipes in the perimeter, thus avoiding a gas buildup and the floating of the geomembrane. In case of high groundwater levels, **FABRINET** can help to reduce the hydrostatic pressure below the geomembrane. In addition, **FABRINET** protects geomembrane against puncturing caused by angular subsoil.

Applications

- Ground water drainage
- Biogas drainage/subsurface gas drainage
- Leachate drainage



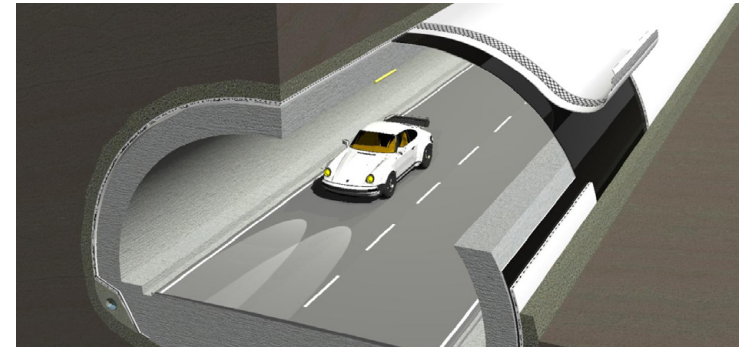
TUNNELS

Robust and efficient drainage systems are necessary to overcome water seepage problems in tunnel applications.

FABRINET intercepts groundwater seepage between the rock face and the inner concrete shell. In cut and cover tunnels **FABRINET** provides external drainage, relieving hydraulic pressure acting upon the tunnel structure.

Applications

- Drainage of rainwater and groundwater in cut & cover and rock tunnels

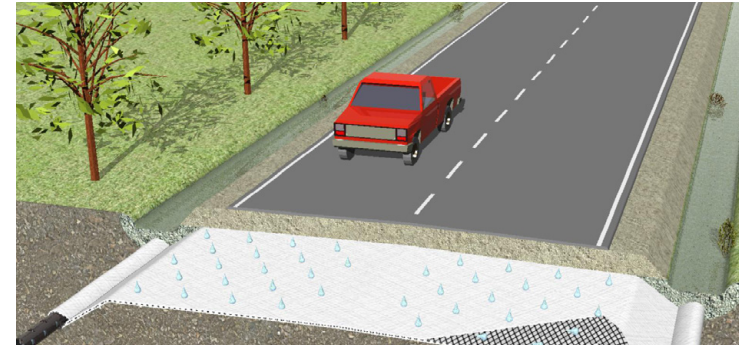


ROADS AND RAILWAYS

One of the principal reasons for premature failure of road or railway foundations is the damage of the bedding caused by water. **FABRINET** installed within the foundation is used for fast collection and conveyance of the water to the edge drain trenches. This way **FABRINET** helps to achieve a longer service life of the construction. Its excellent compressive strength makes it the ideal product for these applications.

Applications

- Drainage of embankments
- Vertical road edge drains
- Drainage of foundations
- Drainage of railway track beds
- Soil retaining structures
- Bridge abutments

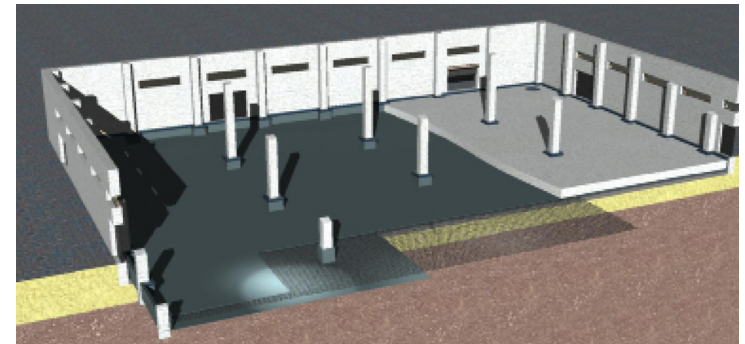


CIVIL WORKS AND BUILDING CONSTRUCTION

FABRINET installed vertically on walls or horizontally under foundations provides an excellent system for the continuous and uniform collection of underground water and rainwater and eliminates the hydrostatic pressure thereby increasing the service life of the building. **FABRINET BP** is also used for leak detection and gas venting around and beneath basements and underground structures.

Applications

- Foundations / basements
- Parking decks
- Basement walls
- Retaining walls
- Flat roofs
- Sport fields
- Runways
- Wall and cellar drainage



About Solmax

Solmax is a world leader in sustainable construction solutions, for civil and environmental infrastructure. Its pioneering products separate, contain, filter, drain and reinforce essential applications in a more sustainable way – making the world a better place. The company was founded in 1981, and has grown through the acquisition of GSE, TenCate Geosynthetics and Propex. It is now the largest geosynthetics company in the world, empowered by more than 2,000 talented people. Solmax is headquartered in the province of Quebec, Canada, with subsidiaries and operations across the globe.

Uncompromised quality

Our products are manufactured to strict international quality standards. All our products are tested and verified at our dedicated and comprehensive laboratories which maintain numerous accreditations. We offer our partners a wide scope of testing according to published standards to ensure products delivered to sites meet specified quality requirements.

Let's build infrastructure better

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