



geoquest

Basal Reinforcement with ArmaLynk[®]

ArmaLynk®

The ultra-high strength geogrid

The development of new infrastructure over weak soils or soils that are prone to subsidence can be challenging and requires thorough assessment, design, and the selection of the right materials.



Building embankments over challenging soils requires high performance materials. Geoquest has an extensive record in designing reliable and durable reinforced soil structures using geosynthetic strips, spanning over various types of applications and sectors.

This experience led to the development of ArmaLynk®, a uniaxial high-performance geogrid made of high tenacity polyester yarns that are coated with a low linear density polyethylene sheath, effectively protecting the fibers from external aggressions and mechanical damages during installation.

These strong strips are welded together with transversal ones that together form a geogrid. ArmaLynk® geogrids can be designed to resist up to 1200 kN/m, and rolls can be customised and adapted to project specifics.



One geogrid, many applications

ArmaLynk® can be used as part of various applications that ultimately aim for sudden rupture prevention and optimal control of differential settlement.

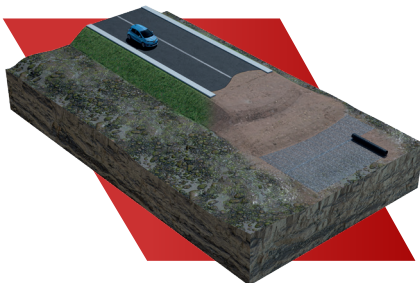
The installation process is straightforward and most of the time consists in the following steps:

1. Surface scraping when necessary
2. Laying down of geogrids, with sometimes several layers
3. Backfilling and compacting

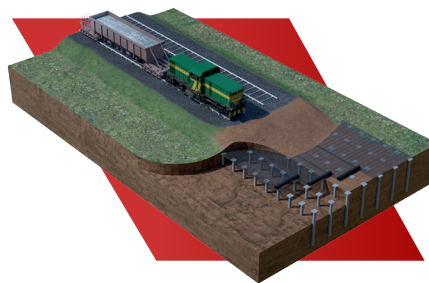


The most common applications include the construction of embankments over soft and very soft soils, over rigid inclusions or over voids:

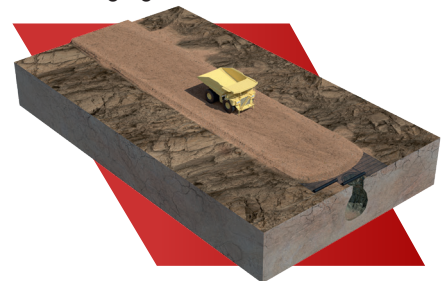
Embankments over soft soils



Embankments over rigid inclusions



Void bridging



ArmaLynk® can also be used whenever high tensile strength is required to build bridge approaches, high embankments, landfill extensions, lagoon closures, access roads or load transfer platforms.

Our solution offers several advantages when compared to traditional methods such as excavation and replacement, vertical drainage, chemical stabilisation, voids injection and others.

These conventional geotechnical approaches are typically more costly to implement due to requiring careful construction staging, additional time, more fill material consumption and use of specialised equipment.

The use of ArmaLynk® in projects generally leads to significant reduction of the carbon footprint compared to traditional solutions.

Geoquest, your first-choice partner from project inception to completion:

Geoquest has an extensive experience for the construction of reinforced soil structures and embankments. Over the years, our teams have developed the capacity to design engineered solutions based on clients' requirements and project constraints. Geoquest supplies high-end select materials and offers on-site technical assistance, providing support throughout the whole installation phase.

**Engineering expertise,
innovation and excellence
in client care to deliver
sustainable solutions.**



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