



Product Overview

Geotextiles Geogrids Geomembranes Geocells Bioengineering Retaining Structures Revetments Habitat Enhancement

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SPECIALISTS IN GEOSYNTHETICS & EROSION CONTROL







At Verdant Solutions we pride ourselves on our service. With quotations being returned by the due date, we hold large stocks of materials at our warehouse, so quick despatch times are guaranteed. As a company with low overheads our prices remain very competitive. We also offer help with design and product suitability and can provide P.I. designs where applicable (at extra cost).

Geotextiles:

Comprehensive range of polypropylene woven and non -woven geo-textiles, needle punched and thermally bonded.

Geotextiles (low-cost):

Geotextile fabrics for paving, pathways, tracks, loading bays, farm roads & temporary haul roads.

Reinforcement Geotextiles:

Woven polyester earth reinforcement geotextile with extremely high -strengths ranging from 90kN/m to 1100kN/m & low creep characteristics.

Geo-membranes:

Flexible reinforced & non reinforced LDPE/HDPE/EPDM durable liners for artificial lakes, ponds and waterways.

Clay Liners:

Bentonite clay liners for a variety of applications where synthetic liners are not suitable.

Geogrids:

Range of polypropylene & polyester geo-grids with strengths ranging from 25kN/m – 300kN/m.

Geocells:

Cellular matrix soil retaining structure – various heights & sizes available.

Gabion Baskets:

Large range of welded mesh baskets (& mattresses) with wire diameter of 3mm – 5mm. Different sizes are available, supplied in galvanised or PVC coated.

Retaining Wall Systems:

Secura Major & Minor mortar-less, hand laid, concrete block retaining wall systems in varying colours and finishes.

Verdadrain:

Geo-composite drainage material comprising a central core bonded to outer filter layers (specification on request).

Nicospan Vertical Revetment Fabric:

Woven geotextile vertical bank support – used in conjunction with class 4 treated timber posts, extremely versatile 0.5m, 1.0m and 2.0m sizes available from stock.

Sediment Curtains:

Semi –permeable to 100% impervious sediment silt curtains are available and are made to any size/ requirement using a variety of geotextile with percolation up to 70 litres/second per m². Reduces fish mortalities during dredging, reduces erosion through wave action and low visual impact when deployed.



Product Overview continued

Erosion Control Blankets:

A range of fully biodegradable to permanent erosion control mattings.

Coir Fibre Tree Mats:

Natural coir fibre weed control blanket, fully biodegradable. Also available in Jute.

Faggots:

Available in hazel, willow or chestnut all year round.

Timber Posts & Hurdles:

All types & sizes available peeled & pointed chestnut stakes & machine treated round to Class 4 specification.

Planted/Unplanted Coir Fibre Rolls:

Grown on our specialist nursery bio-degradable preestablished (or un-planted) coir fibre rolls established with suitable native aquatic plants.

Planted/Unplanted Coir Fibre Plant Pallets: 2m x 1m pre-established plant pallets for immediate bank-side vegetative cover & protection.

Planted/Unplanted Coir Fibre Edge Sods: Unique and compact in shape our pre-planted coir Edge Sods are used to "soften up" gabion baskets, concrete or steel/timber piling).

Fixing Pins/Stakes:

Fully biodegradable timber pegs, metal staples and rebar pins, all sizes (specification on request).

Rock Rolls:

Small flexible & permanent gabion, used in conjunction with coir rolls & bank protection.

Aquatic Plant Planting Service:

Reeds for reed beds and native and local provenance aquatic plants for lake/river enhancements, etc.

Floating Eco Islands:

Custom made to any shape, artificial island systems, for wildfowl or fish stock protection, improve water quality, and protect banks from erosion through wave dissipation.

Protective Nettings:

Rabbit and badger netting, various netting sizes and strengths available, meeting Highways Agency standards.

Grass Block Paving:

Grass paving systems in either concrete or recycled plastic.

Sand Bags:

Hessian or polypropylene bags with tie cords – various sizes for different applications (specification on request).

Geobags:

Polypropylene bags capable of taking up to two tons of material, complete with four lifting eyes (specification on request).

Landscaping Grass Seed:

Landscaping grass seed mixtures, specially formulated for landscape and conservation areas (specification on request).

If you can't see what you are looking for please ask, as we may well be able to source it...

Verdant Solutions Ltd - Geosynthetics Woven & Non Woven Geotextiles



Verdatex is a complete range of woven and non-woven geotextiles designed to create a stable base for a wide range of earthwork constructions. High resistance to naturally occurring acids and alkalis ensures reliable long term performance.

- A range of thermally bonded with strengths of 6kN/m to 40kN/m & needle punched polypropylene geotextiles with strengths from 8kN/m to 84kN/m.
- A range of woven polypropylene with strengths ranging from 21kN/m to 300kN/m and polyester geotextiles with strengths from 90kN/m to 1100kN/m.
- Reinforces poor existing subsoil and prevents it from mixing with the construction materials.
- Limits uneven settlement reducing the risk or rutting or deformation on the finished surface.
- Minimises the need for expensive imported construction material, thus ensuring substantial savings, suitable for where roadways, car parks, driveways, cycle paths, etc, call for a simple separator requiring

low strength characteristics.

Versatile, lightweight and permeable

 the proven solution. Rot proof and inert to all naturally occurring chemicals, Verdatex becomes an integral part of the sub base construction.

Our woven polyester geotextile can also be produced in higher strengths than specified, if required.

Embankments • Access Roads • Piling Platforms
Car Parks • Hard Standings • Driveways
Sports Grounds • Erosion Protection • Liner Protection



Verdant Solutions Ltd - Geosynthetics Liners & Geomembranes





Our range includes flexible reinforced and non-reinforced plastic and rubber membranes offering high tensile strength and puncture resistance.

Pictures:

Top left - Verdaliner LLDPE with protective geotextile

Top right - Verdaliner HDPE with Verdacell laid on top and filled with stone

Also, reinforced Bentonite clay liners offer economic benefits over compacted clay liners. Easily installed with excellent self-sealing properties.

Centre - Verdaclay Clay Liner (showing the lifting beam used to install)

Bottom right - Verdaclay Clay Liner installation





Above - Verdaliner EPDM Rubber Liner with top hat installed



Verdant Solutions Ltd - Geosynthetics & Retaining Structures Geogrids



Verdagrid G woven geogrids are made of high-strength polyester fibres coated with a layer of PVC compound. They are supplied in standard strengths ranging from 20kN/m to 300kN/m longitudinally and 20kN/m to 100 kN/m transversally, with mesh size being 20mm or 35mm. Also, the same kN/m strengths are available in both directions.

Verdagrid C is a rigid polypropylene, biaxial geogrid for stabilisation of soil structures on low bearing capacity soils. Verdagrid is a welded geogrid and its grid structure of extruded bars delivers increased passive bearing resistance and optimum interaction in most soil types.

By stabilising the sub base Verdagrid can reduce the granular fill material up to 30% and decreases construction time significantly. Verdagrid is supplied in 5m wide rolls and during installation the product is easy to handle.

Verdagrid exhibits equal tensile strengths in both longitudinal and transverse directions, making it most suitable for soil stabilisation applications.

Verdagrid is ideal for sub-base reinforcement with optimal price/performance.

Main applications include:

- Construction of roads, motorways, parking places and airports
- Construction of railways
- Construction of industrial areas, halls and buildings
- Construction of waste dumps
- Construction of retaining walls, slopes and noise barriers
- Re-instating of landslips
- Bank stabilisation of seas, lakes and rivers
- Construction of temporary roads



We offer help with concept design, budget costing and installation advice on all our products

Verdant Solutions Ltd - Retaining Structures Gabions & Retaining Wall Systems

Gabions offer a time-honoured system for the construction of river walls - revetments - drainage channels - canals - reservoirs - coastal defences - retaining walls and many other applications.

Verdant Solutions are able to offer a comprehensive range of welded galvanised and/or plastic coated gabions as standard. Non standard components can usually be supplied quickly and economically.

Normally only a simple foundation layer is required, consisting of a grading layer of granular material.









Secura retaining wall products provide housing developers, landscapers, civil engineers and home owners with the most attractive and cost-effective solution to their retaining wall or planter-building requirements. Quick and easy to use Secura walling is a dry-laid, solid block system offering quality in appearance, materials and design flexibility. It can be used as a gravity walling system or, combined with Geogrid, to form reinforced soil walls for retaining structures.



Verdant Solutions Ltd Erosion Control & Bioengineering



Verdamat is an erosion control matting available as a biodegradable and a non biodegradable turf reinforcement mat. We supply a range especially designed for re-vegetation and long-term erosion control, for use on embankments, drainage channels and to protect from seed washing out after sowing. The matting is also used to contain seed prior to germination when used in conjunction with Verdacell.







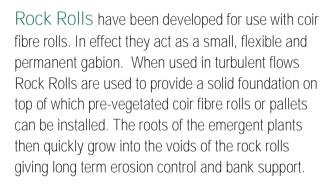
Turf Reinforcement

400

400PP



Faggots have long been used, for a variety of engineering projects. We have devised many erosion control and river training programs incorporating faggots in conjunction with a range of our products, often dictated by specific environmental considerations. Once placed, Faggots, have a very long life and thus become an integral part of many of our designs particularly where coir fibre rolls and pallets are used.







Verdant Solutions Ltd Erosion Control & Bioengineering





Silt curtains are designed specifically to contain and control the dispersion of suspended solids in water bodies during pile driving, site work, dredging operations, bank re-profiling, quarrying, marine construction or the result of navigation. The curtains confine turbity improving localised settling times of suspended solids in a defined area thus impacting less on the immediate & surrounding aquatic habitat.



Nicospan is a product for vertical bank protection. It can provide a high-quality and very economical form of erosion control.

It is especially useful where access to the bank is limited and is the ideal low cost bank protection for use in streams, small watercourses, lakes and ponds. Vegetation can be encouraged by either sowing grass seed in to the soil on top of the bank immediately behind the Nicospan and then covering with our Verdamat Erosion Control Matting or our Pre established Coir Fibre Pallets to increase protection and enhance the appearance of the slope.



VerdaceII - for soil retention/erosion control on steep slopes where vegetation needs to be established and for the protection of impermeable liners.

Verdacell is a cellular matrix of interconnecting polymer strips that form pockets to locate and strengthen the fill material. The polymer strips confine the filling material and provide a tensile strength, very effectively, increasing the shear resistance and cohesion of the fill.



Verdant Solutions Ltd - Erosion Control & Bioengineering Coir Fibre Rolls, Pallets & Edge Sods



Bioengineering with coir fibre products is the proven approach for effective, yet sensitive design and construction. Natural materials and growing vegetation bring together biological, ecological and engineering concepts to both vegetate and stabilise eroding banks on lakes and rivers.

Coir fibre products support the growth and development of plants that physically secure the bank or shoreline. Native UK wetland plants, used in our coir products are selected for their adaptation to varied physical conditions and, also, for invertebrates, fish and wildlife.

Coir Fibre Rolls are made from specially prepared natural coconut fibre, compressed into a roll and encased in a polypropylene mesh or coir netting. They have 18 pre drilled planting holes and a density of 9 to 10kg /lin.m. When dry they weigh approximately 27kg and when wet 55kg. They are available in 3m long lengths x 300mmØ, unplanted or pre established with UK native aguatic plants.



Coir Fibre Pallets are supplied in 1m x 2m lengths respectively. They are pre-established with UK native aquatic plants or can also be supplied unplanted. Pallets are ideal to cover large areas of erosion quickly, or for establishing areas of instant aquatic vegetation where none existed previously.

Coir Fibre Edge Sods measure 1m long x 300mm high x 100mm thick and are designed to provide a "soft" engineering solution to "hard" revetments such as gabions and sheet steel or timber pilings. A healthy

stand of vegetative cover along the top edge or upper face of a hard structure at the water line can provide instant habitat and cover where previously none would have existed.







Verdant Solutions Ltd - Erosion Control & Bioengineering Floating Islands, Plants & Habitat Creation



Floating Islands are a low cost, modular unit system that allows the creation of custom made floating islands. They can incorporate unique add-ons such as antipredator fish refuges, biological filters, anti-grazing framework and spawning medium. Habitat sanctuaries, both above and below the water, encourage colonisation by dragonflies, invertebrates, amphibians and, importantly, fish. In

addition, they can absorb pollutants & can remove suspended solids, reducing eutrophication & algae.

Wildlife and Water Vole Habitat

Bioengineering is most suitable for where banks on watercourses have been eroded away and have become unstable. Bioengineered solutions can stop erosion and create new habitat that directly benefit water voles too. Once installed, pre-established coir fibre rolls quickly become



part of the water courses natural fabric and wildlife is quick to take advantage. It has long been established that water voles will use

the vegetation on these established rolls and, additionally may also use the coconut fibre as nesting material.



Aquatic Plants both native and formal, we specialise in supplying top quality, hardy aquatic plants, using only plants sourced from UK provenance and can supply local provenance where required (lead time required). Verdant also provide a full planting & consultation service, anywhere in the UK. We also, specialise in the supply and installation of reed beds for treatment systems and all wetland re-creation schemes. We can even help with aquatic plant removal, if required.

Verdant Solutions Ltd Landscape & Amenities



Verdamulch Coir Fibre Tree Mat's are made from 100% coir fibre enhanced with a natural latex backing to add strength to the mat. They are also available in Jute and both come complete with slot and aperture, ready to use.

- 100% natural and sustainable product
- Totally suppresses weed growth
- Water and fertilizer permeable
- Excellent insulation properties
- Very strong and durable, will not tear or fray

Turfstone is a grass paving system designed for use in areas where a hard surface is required for vehicular access in a natural grass environment.

Turfstone's honeycombed cavities are designed to facilitate the growth of grass within a supporting concrete matrix, allowing grass to be cut in the conventional manner. The full strength of the installation will only be developed as and when the grass cover is fully established. The grass roots bind the units and provide much of the long-term load carrying ability.





Verdapave is a plastic ground reinforcement product made from recycled polyethylene. It is the solution for car parks, pedestrian and cycle paths, picnic areas, golf courses, parks, fire lanes, event areas and horse paddocks. Verdapave is an environmentally friendly alternative for use in domestic driveways, airfield runways and taxi ways, reinforcement of roadsides, banks, shores and slopes. It is a sustainable ground reinforcement tile that provides excellent water drainage.