



PHOENIX GROUND COVER AND GEOTEXTILES

Phoenix Amenity offers a wide range of ground cover weed suppression mulching products including biodegradable mulch mats and rolls, water permeable woven polypropylene products, fixing pins, bark and geotextiles for Civil Engineering use.

ROOT BARRIER 300, 600, 1000 & 2000

Research has shown that if roots are deflected downwards whilst the tree is young, many other problems which occur as the tree grows can be avoided, i.e. hazardous pavements, disrupted services etc. With Re-Root 600/1000 the roots are encouraged downwards. By the time they reach the bottom of the barrier they are sufficiently deep to be below the level at which they can disturb the surround. Deeper roots also mean that the tree is more securely anchored and better able to withstand periods of drought. Re-Root is also ideal for installation in conjunction with cable laying. Risk of root damage to the cable conduit is greatly reduced and if the service requires subsequent excavation, this can be accomplished with far less disruption to the trees root system.



NEWT BARRIER

Newt Barrier membranes are tough plastic sheets used to exclude, or contain, newts, frogs, snakes and small wildlife - protecting them from entering hazardous areas (such as construction sites or road crossings).

The Newt Barrier sheets can be fixed to a simple post and rail timber fence, and the bottom edge entrenched to provide an impenetrable barrier. The smooth surfaces are difficult for reptiles and amphibians to climb.

The tough UV stabilised membranes are designed to resist weather damage - thus providing reliable protection throughout the works. The standard clear grade is intended for construction projects, while the reinforced black grade is a heavy duty alternative for long-term use or exposed locations.





BARK

Without doubt, the most common source of natural mulching material used on the shrub beds. The ideal depth of bark for optimum weed suppression is 75mm, although this can be greatly reduced if a mulching membrane is incorporated prior to the bark application. Phoenix supplies mulching grade bark either loose or in bags. A playground bark is also available. The table below gives a guide to the coverage one cubic metre of bark will give if laid evenly to the depth stated.

We offer a complete range of bark and wood mulches, ranging from highly decorative ornamental grades and playground bark through to basic utility grade materials. Samples are available on request and we offer competitive prices on bulk loads. Price on application.

BIO-MAT - BIODEGRADABLE MULCH MATS & ROLLS

Bio-Mat is a blend of hair and jute in a thick layer (450g/m²) designed to help soil moisture retention with excellent soil warming properties. Available in 50cm and 1m squares and 1m x 25m long rolls.



WOVEN POLYPROPYLENE SQUARES & ROLLS

Woven polypropylene squares manufactured from (1200 gauge) 100g/m² UV stabilised resistant material to provide weed suppression for up to 5 years. It is water permeable to allow flow of water, air and plant nutrients. Available in both 50cm and 1m squares.

BLACK POLYTHENE SQUARES & ROLLS

An economical and effective method of reducing water loss to increase survival of newly planted trees and shrubs. Black opaque UVI polythene with a thickness of 125mu which is completely degradable over 3 years. Available in 50cm and 1m squares as well as 1m x 200m rolls.





HEMCORE BIO-MAT – ADVANCED BIODEGRADABLE MULCH MATS AND ROLLS

Hemcore Bio-Mat is a durable (800 g/m²) mulch mat made from natural, sustainable and renewable hemp fibres and is manufactured and produced by UK farmers. Designed to help soil moisture retention and with excellent soil warming properties. Available in 50 cm and 1 m squares and 1m x 25 m long rolls.



COIR MULCH MATS

Coir mulch mats offer greater long term protection against existing and future weed and grass growth and will improve long term soil quality.

- 100% Biodegradable coir fibre
- Environmentally friendly and maintenance free
- Protects against desiccation and frost damage
- Will not deplete nitrogen during degradation



Material weight: 1000 g/m² **Sizes:** 300 mm - 1000 m available

SPUN BONDED POLYPROPYLENE

Although not as strong as woven polypropylene, this product is light to handle, water permeable and tear resistant and will not fray. UV stability enables this product to be effective for up to 3 years. Available in 1.5 m and 2 m wide rolls.

FIXING PINS AND PEGS

A range of environmental friendly biodegradable pegs, black plastic pegs and steel pins, for securing mulch mats and rolls, black polythene and woven polypropylene mulching products.

WOVEN POLYPROPYLENE ROLLS

Woven polypropylene roles are manufactured from 105g/m² UV resistant polypropylene to provide unbeatable weed suppression whilst allowing free flow of air, water and plant nutrients. Woven polypropylene roles are also puncture and tear resistant and can withstand light vehicle and regular pedestrian traffic. Available in 0.3 m, 1.05 m, 2.1 m, 3.3 m, 4.2 m and 5.3 m wide rolls.





TERRAM 1000

The most specified UK Geotextile in the Civil Engineering industry. It provides an easy to use and permanent solution to the problem of separating sub-bases from top layers, i.e. sand from gravel, aggregate from subsoil and sand from soil etc. For use under paths, roads, car parks, golf bunkers and play barked areas etc, especially effective on soft ground or weather sensitive sub-soils. Available in 4.5 m x11 m long and 4.5 m x 100 m long rolls.

Other products are available please enquire for details

TURF REINFORCEMENT RANGE

The premium version of TENAX Turf Reinforcement Mesh is a more robust mesh which has been specifically developed for the reinforcement of grassed areas which are to be used for overflow car parks. During wet weather and without any form of stabilisation, the ground can quickly turn into a muddy mess creating problems for vehicles and their drivers.

The installation of Turf Reinforcement Mesh - Premium is simply carried out by rolling out the mesh and pinning down with TENAX Fixing Pins. Once established this will create a more stable surface which will support the weight of light traffic and heavy pedestrian use.

Premium Applications

- Temporary overflow car parks
- Lawn reinforcement for cars, boats and caravans
- Parking areas for light aircraft
- Heavy pedestrian use





GRASS PROTECTION MESH - STANDARD AND PREMIUM

Available in two grades - Standard and Premium - Grass Protection Mesh is a heavy duty polymer grid with a multitude of uses in the landscaping, public amenity, leisure and educational sectors. These include heavily used overflow car parks, emergency access routes, grass runways for light aircraft, reinforcement of grass verges, tree root protection, wheelchair access and equestrian applications.

Both Standard and Premium Grass Protection Mesh are UV stabilised, resistant to chemicals and rot proof, providing a hard wearing and long lasting stable surface for grassed areas, which are used frequently by cars and heavier weight vehicles.

Installation is easy and quickly carried out by simply rolling out the mesh over the area to be protected and pinning down with TENAX Fixing U or J Pins. The area will soon resume its natural appearance while protecting the grass from damage and help to prevent rutting.

If required, parking bays can be marked out using TENAX Parking Markers which will guide drivers to the right location and ensure that optimum use is made of the parking areas. They are also suitable for indicating the direction of access routes.

GROUND STABILISING MESH

When farm gateways and tracks become waterlogged and impassable because of deep mud, TENAX Ground Stabilising Mesh provides a low-cost base and effective solution.

TENAX Ground Stabilising Mesh is a high strength polymer grid which when covered with a layer of well-graded rough stone (Type 1 Roadstone), forms a rigid interlock, producing a stable surface for animals, farm equipment and other vehicles.

Installation is simply carried out by levelling the surface and filling any deep ruts with crushed stone and removing any major projections. TENAX Ground Stabilising Mesh can be rolled out over the prepared site and covered evenly with Type 1 Roadstone. The depth of stone will depend on the ground conditions and the purpose for which the access is required.

The protected area can be used immediately and over a period of time will compact even more resulting in a permanent access route.





GRIDLOK

In areas that require the high load bearing capacity of asphalt, TENAX GridLok offers a soft landscaping solution to hard landscaping problems. In addition it is both economically viable and aesthetically pleasing.

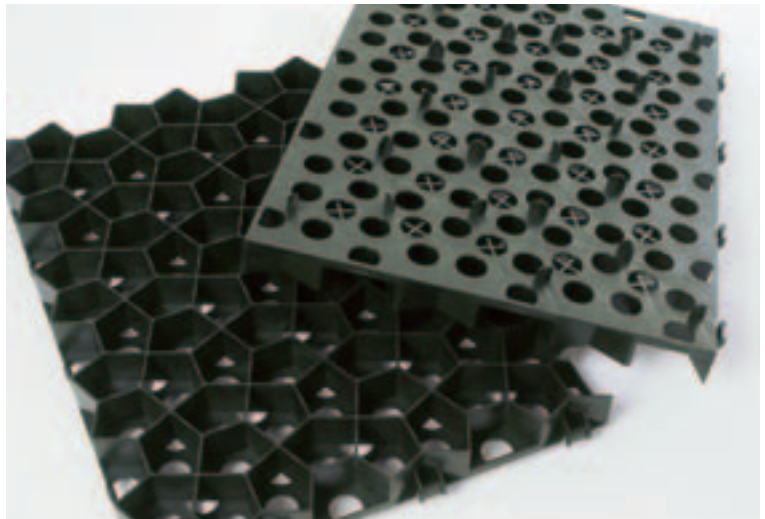
Manufactured from HDPE into convenient sized injection-moulded pavers, TENAX GridLok is resistant to oil, chemicals and extremes of temperature and has the strength to withstand loads in excess of 170 tonnes per square metre.

Unlike traditional methods of constructing hard standing areas, there is less site preparation required with GridLok which enhances the sub-base, reducing the need for excavation and expensive granular backfill.

When installing GridLok, the depth of sub-base will depend on the loading to be placed on it. CBR tests will give an accurate indication of the sub-base required.

Once the sub-base has been established installation of GridLok is quickly carried out by placing the pavers on to 70:30 sand / soil layer and then seeded or turf rolled in to the cells if a grass finish is required. Alternatively if the cells are to be back-filled with stone, simply bed the pavers on to a layer of sand.

When covering large areas, inter-connecting and self-positioning supports provide stability and link multiple units.





TRACKGUARD™

TENAX TrackGuard™ is probably the toughest product around for protecting grassed and hard standing areas from damage by heavy vehicles.

Manufactured from high density polyethylene, this thermoplastic extruded mesh panel is extra thick to support heavy weights and has a high profile providing extra grip for both wheel and tracked vehicles. UV stabilised and unaffected by chemicals, TENAX TrackGuard™ can be re-used many times over providing long lasting protection.

Supplied in panels measuring 2.05m x 1.12m TENAX TrackGuard™ weighs less than 10kg yet each panel will support vehicles up to 20 tonnes. Simply laid down and joined with fixing pins or cable ties, TENAX TrackGuard™ can be either used for temporary protection or if left in position the grass will grow through the mesh providing a stable and green environment.

Applications

- Temporary access by construction plant over grass
- Temporary access by construction plant over asphalt
- Reinforcement of entrance to overflow car parks
- Temporary roadways
- Gateways
- Entrance to car parks
- Cable protection
- Movement of caravans



AZTEK

The range of AzTek non-woven thermally bonded geotextiles has been developed to meet the demanding needs of the construction market. Available in two grades, which will satisfy most of the projects carried out in the UK, AzTek delivers high performance solutions to a range of applications including separation, support, protection, filtration and drainage.

Incorporating AzTek in the installation of other TENAX products will result in greater stability, reduce the problems of settlement and provide a long lasting solution to reinforcement problems.

AzTek is particularly suitable for use with TENAX GridLok, TrackGuard™ and Ground Stabilising Mesh.





Composition and Environmental Behaviour of AzTek Geotextiles

Composition – 70% polypropylene / 30% polyethylene.

Chemical resistance - AzTek is resistant to all naturally occurring alkalis and acids.

Biological resistance - AzTek is unaffected by bacteria and fungi. Nor is it attractive to vermin as a food source.

Reaction to temperature - The tensile strength of AzTek decreases with the increase in temperature but fully recovers when the geotextile is returned to normal ambient temperature.

Exposure to sunlight - AzTek is delivered in polyethylene sleeving to protect it from harmful effects of UV rays. It is recommended that the protective wrapper is kept on until geotextile is used.

Applications

Separation

When AzTek is placed between the different layers in construction projects. It will prevent the migration and merging of materials while still allowing free movement of water.

Filtration

AzTex geotextiles are designed to retain soil particles while allowing free movement of water, making it possible to separate two layers during intense hydraulic activity.

Drainage

The hydraulic properties of AzTex geotextiles are designed to drain excess water off the construction by flowing in the plane of the fabric away from the construction.

Protection

The high static puncture resistance of AzTex geotextiles make them ideal for protecting waterproof membranes and other sealing materials from puncture when fill material and loads are applied.





ACCESSORIES

Fixing U Pins and J Pins / 6 mm

Secure Turf Reinforcement Mesh and Grass Protection Mesh to the ground with either U or J Pins, subject to ground conditions. J Pins are also suitable for installing TenWeb.

J Pins

Size: 300 mm

Quantity per outer: 100

Colour / Material: Ribbed Mild Steel



U Pins

Size: 150 mm

Quantity per outer: 25 / 100

Colour / Material: Ribbed Mild Steel

Fixing U pins / 8 mm

Secure TrackGuard™ to the ground with this heavy duty fixing pin. Also used to join panels together

Size: 200 mm

Quantity per outer: 25

Colour / Material: 8 mm Ribbed Mild Steel



Parking Markers

For indicating parking bays, this highly visible marker peg ensures optimum use is made of the available grass parking area.

Size: 100 mm

Quantity per outer: 100

Colour / Material: White / PP



Gridlok Markers

Mark out parking bays and direction routes with this highly visible marker which slots easily into the paver cells.

Size: 100 mm x 150 mm

Quantity per outer: 50

Colour / Material: White / PP





Net & Mesh Pegs

Alternative fixing for Turf Reinforcement Mesh where metal fixing pins are considered unsuitable. Also ideal for installing MultiMat 30 and 100

Size: 150 mm
Quantity per outer: 500 & 1000
Colour / Material: Black Polypropylene

Size: 190 mm
Quantity per outer: 100 & 1000
Colour / Material: Black Polypropylene

MultiMat Staples

For securing MultiMat 30 and 100.

Size: 200 mm
Quantity per outer: 250
Colour / Material: Mild Steel

Cable Ties

Range of lockable ties for secure joining of TrackGuard™ panels and for general purpose applications.

Size in mm	140 x 3.6
Quantity per outer	1000
Colour / Material	White / PP

Size in mm	200 x 4.8
Quantity per outer	1000
Colour / Material	Black / PP

Size in mm	300 x 7.6
Quantity per outer	1000
Colour / Material	Black / PP



GROUND COVER PEGS

Black plastic pegs which have flat barbs to ensure peg is secured in the ground and a flat top to prevent tearing in exposed sites where lifting may be a problem.

GROUND COVER PINS

Strong and durable metal staple for securing ground cover. Particular good for holding wool mats.





TENWEB

The ground on slopes is often dry and rocky due to a lack of organic material. Under these conditions, it is necessary for an adequate depth of soil to be provided to allow for growth of vegetation. Since topsoil has poor mechanical properties, it can easily slide down the slope and get washed away by heavy rainfall before vegetation has become established.

TENAX TenWeb geocells are honeycomb shaped structures, manufactured by continuous extrusion of polyethylene without any welding. The structure expands and therefore, can be stored and transported with minimal space. When opened out during installation, a series of completely interconnecting ovoid cells is created. Once expanded to its maximum extension and filled with light compacted soil or fine aggregate, a means of confinement and unconsolidated materials is created within the cells preventing their movement even on steep slopes. If required, the area can be seeded to achieve a green environment. The junctions of TenWeb have a central opening which water can permeate ensuring that organic material receives moisture for rapid growth.

SPORTS & AMENITY RANGE

GRASS GERMINATION SHEET

Following extensive trials carried out by the world-renowned Sports Turf Research Institute, TENAX can offer effective, time saving Germination Sheets for newly seeded areas. Available in two qualities the premium version can be used all year round providing protection against frost, wind, sun and birds. Where as the standard material is ideal for use in Spring and Summer.

SAFETYMAT

Grass surfaces can be very unforgiving if accidentally fallen upon and can also be very slippery following heavy rainfall. In addition if the wet grass is used frequently by pedestrians, this can quickly turn into a muddy path with grass roots completely worn away.

TENAX SafetyMat is an environmentally friendly, anti-slip, impact absorbing safety surface which provides a solution to these problems. Manufactured from recycled rubber, TENAX SafetyMat is simply laid on to the grass and pegged down. During the growing season the grass will grow quickly through the rubber mesh providing a stable and durable surface.





Ideal for bridges, walkways and sloping paths, SafetyMat can be used on flat or undulating ground and makes access by wheelchairs and pushchairs much easier. TENAX SafetyMat can also be used on concrete surfaces and wooden flooring which are prone to becoming slippery when wet. (If required SafetyMat can be secured to the ground with Net Pegs).

MULTIMAT 30 / 100

Provided that the quality of the soil is capable of sustaining and preserving organic material, the planting of vegetation is a well established means of preventing soil erosion on slopes and embankments and there is a wide choice of herbaceous plants and shrubs that are suitable for this purpose. However, during the initial phase of planting, the topsoil is easily subjected to wash out and soil erosion during heavy rainfall.

Such conditions can result in significant loss of soil and formation of moderately deep furrows. All this occurs because of barrenness and fragility of the vegetation during its initial phase of growth because the root system has insufficient time to become established in substrate.

TENAX MultiMat 30 and 100 erosion control geomats are three-dimensional structures, manufactured from three polypropylene meshes that have been extruded and subsequently oriented. The products have a high tensile strength and a low unit weight which makes the geomats ideally suited for installing on steep and very long slopes.

Installation can be carried out by unskilled labour simply by unrolling the TENAX MultiMat onto the slope, fixing in place with MultiMat Staples and covering with topsoil. Grass growth can then be established either by hand seeding or hydro-seeding. Once installed the two-dimensional structures of the geomats protect the layer of topsoil and anchors the roots of the grass to the soil matrix, thus helping to minimise both the effect of rain impact and soil migration due to surface runoff.

Applications

- Slope protection
- Storm and irrigation channels
- Lakeside banks and landfill capping
- Protection of roadway ditches

