

A.G.A. COIR, WOOD & STONE

Sensitive
bio-engineering
solutions for
erosion control,
water quality and
habitat restoration.

We are leaders in controlling
erosion and improving
the environmental aspects
of streams, rivers,
lakes, balancing
ponds and
wetlands.

- Vegetated coir rolls
- Vegetated coir pallets
- Coir blankets
- Composite installations
- Biodegradable erosion control
- Rock rolls

*Concept to
Completion*



T: 01953 886824



A.G.A. PRE-VEGETATED COIR ROLLS.

We are the largest growers of pre-vegetated coir modules in the UK. Pre-vegetated coir rolls control erosion by supporting the growth and development of the plants that will physically secure banks or shorelines. Native aquatic plants with proven provenance are selected for their adaptation to varied physical or hydrologic conditions while providing important cover and habitat for invertebrates, fish and wildlife.

A.G.A. Pre-planted coir rolls protect the toe of slopes and retain fill material. Where there is deep undercutting, we can create stable foundations using our Rock Rolls, Faggots, Gabions, Geotextiles or RipRap. We have developed a number of techniques using vegetated coir rolls which are designed to green-up and reduce the unsightly impact of hard engineering structures, i.e. concrete, sheet steel or plastic piling.



Vegetated Coir Rolls Mixed planting 6 plants/linear metre

300mm dia. x 3m long	400mm dia. x 3m long	200mm dia. ornamental rolls
<i>Iris pseudacorus</i> <i>Carex acutiformis</i> and <i>riparia</i> , <i>Phalaris arundinacea</i> <i>Juncus effusus</i>	<i>Iris pseudacorus</i> <i>Carex acutiformis</i> and <i>riparia</i> <i>Phalaris arundinacea</i> <i>Juncus effusus</i>	<i>Iris pseudacorus</i> <i>Iris kaemtferi</i> <i>Lobelia cardinalis</i> <i>Caltha palustris flore plena</i> <i>Scirpus albascens</i>

A.G.A. PRE-VEGETATED COIR PALLETS.

Coir pallets are the simple answer for the rapid and natural establishment of marginal aquatic vegetation. Whether to create margins to lakes, ponds, rivers or stream banks, or to cover artificial linings or repair and enhance areas of damage, pallets will probably be the most reliable solution.

Our vegetated pallets are often the initial reed supporting vehicle used in waste water treatment systems; they are also used for the creation of habitat, the stabilisation of wetlands and waterside banks. Using our pre-grown plant pallets, a mature stand of native wetland plants can be laid and quickly established on site. We know the range of aquatic species our Clients may require to satisfy environmental and engineering functions. Being aware of geographical distribution needs for indigenous planting, we can grow species from locally harvested seed or original plant stock providing the level of provenance required.



Plant Pallets Monocultures of 18 plants/m²

<i>Phalaris arundinacea</i> <i>Phragmites australis</i> <i>Typha latifolia</i> <i>Carex acutiformis</i> <i>Iris pseudacorus</i>	<i>Scirpus lacustris</i> <i>Juncus effusus</i> <i>Lythrum salicaria</i> <i>Sparganium erectum</i>
---	--

A.G.A. ECONBLANKET.

EconBlankets provide the conditions for vegetation to stabilise soil. Each of our product grades has been developed to offer the best performance under varying conditions and serve as fully biodegradable short or medium term reinforcement systems. Once vegetation has established the quilt and photodegradable material will disappear during years 1 to 3.

EconB SP: 100% bio-degradable straw/hay mixture stitched between slow degrading PP netting.

EconB CP: 100% bio-degradable coir stitched between slow degrading PP netting.

EconB SJ: 100% straw/hay mixture stitched between biodegradable jute mesh.

EconB CJ: 100% coir stitched between bio-degradable jute.

Extremely economical when used to:-

- Protect newly soiled embankments
- Vegetate and green new cuttings
- Grass line the banks of watercourses
- Edge lakes and balancing ponds
- Enhancing reinforced soil structures
- Promote the establishment of wild flower seeds



A.G.A. ROCK ROLLS.

Rock rolls offer the green credentials associated with bioengineering systems. They provide a solid, durable foundation for sympathetic partnering with our coir fibre units or faggots.

Aquatic plant roots that grow in coir will develop and establish into the rock voids giving long term erosion control, bank support and importantly provide habitat enhancement from the aquatic fauna.

Initially developed by us for use as a solid foundation on top of which pre-established coir rolls can be installed, they also function as flexible but permanent sub-surface gabions providing a more robust method of erosion control in turbulent and fast flowing conditions. They reinforce the toe of the channel reducing the risk of the current undercutting and weakening the bank.

Rock rolls can often be used as stand-alone modules to very good effect, possibly as landscape features or by giving activity and interest to the water flow, this in turn will aerate and improve the water quality and provide habitat for micro-organisms.



A.G.A. WOOD SYSTEMS.

Sustainable A.G.A. bio-engineering systems

Faggots, Hazel Spilling, Fascine Weips, Chestnut and Softwood Posts

Spiling offers protection from erosion both above and below the water line. It stabilises the embankment behind the structure and can rapidly establish a strong root mass and vigorous top growth using live willow or dead hazel. Subsequent management will control growth to required finish. They are self-regenerating and can be used in a wide variety of situations

Faggots will support fibre rolls or pallets at the correct water level and protect banks. They accrete silt while the vegetation establishes and will provide a safe aquatic habitat suitable for fast flowing waters. They meet exacting environmental standards and have a very long life which soon becomes an integral part of the project.

Fascine mattress technology is well proven to control erosion in tidal and fast flowing waters. They are made from bundles of willow known as Weips and brushwood bundles then constructed according to the application and usually anchored into position with rocks and or boulders.



A.G.A. 125 COIR BLANKET.

A.G.A. 125 Stitched Erosion Control Blanket consists of a biodegradable matrix of coir fibre held between two biodegradable jute (and or Polypropylene) layers of netting. This is a very effective medium for long term erosion control application on steep slopes where vegetation is the primary stabilising medium.

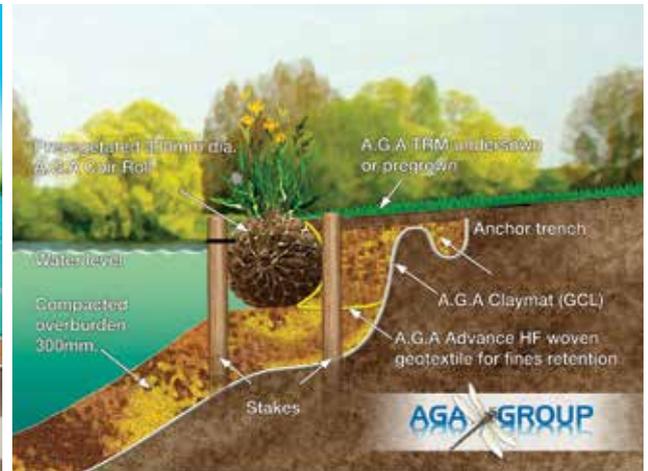
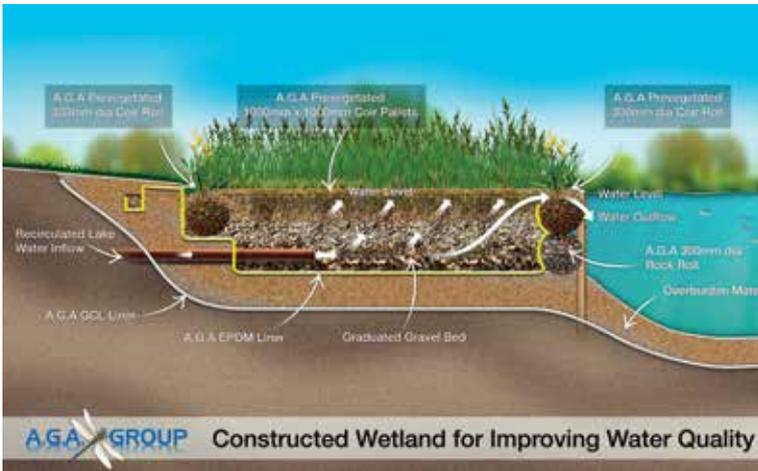
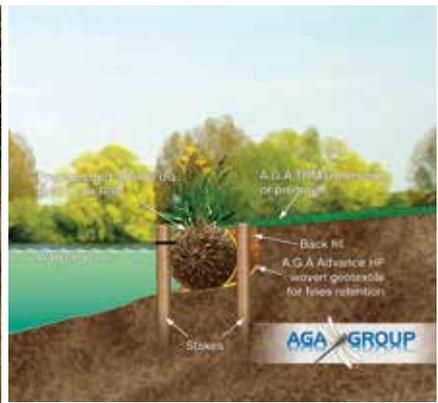
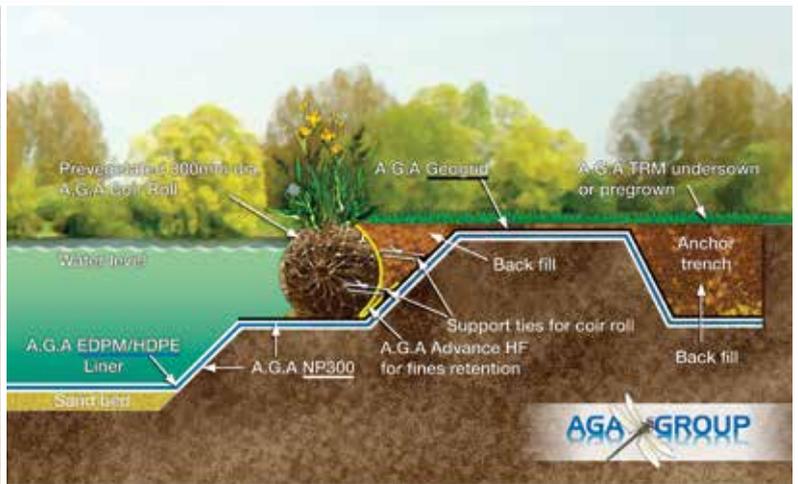
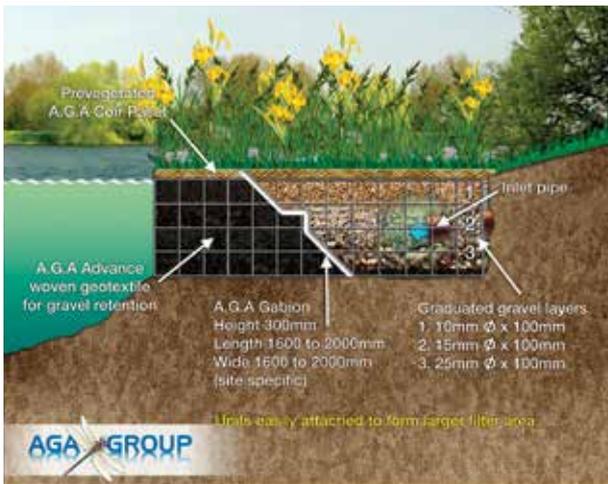
The product is light and flexible so drapes evenly over surface contours thus, when pinned, it holds closely to the underlying surface avoiding the creation of voids that could otherwise remain un-vegetated.

[A.G.A.125 B.J.](#) Is our medium term erosion control blanket with biodegradable jute netting that has a lower elongation factor and higher tearing strength than PP blankets, this is best installed on slopes with low to moderate run off areas and it biodegrades in approximately one to two years.

[A.G.A.125 PP.](#) This long term erosion control blanket with UV Stabilised Polypropylene netting on both sides is used on steep slopes with moderate run off; it has a low elongation factor and high tearing strengths and will biodegrade in approximately three to four years.



TYPICAL EXAMPLES: A.G.A. COIR, NATURAL & COMPOSITE INSTALLATION SYSTEMS.



The A.G.A. Group provide current and detailed Technical Specification and Information Sheets for all product groups. These are available as hard copy on request or can be downloaded directly from our website <http://agagroup.co.uk/home-page/product-and-services-info-sheet-downloads>

This information is subject to change arising from new developments and findings. If you are unable to find the item you are looking for, please do not hesitate to contact us immediately.

The A.G.A. Group contracts division are specialist within the field of aquatic and bioengineering. We operate a policy of 'Best Practice' and are bound by the Code of Conduct of both the Institute of Fisheries Management and the Royal Society of Biology.

The A.G.A. Group will quote for the supply of materials, their installation or for 'turnkey' projects.

A.G.A. is Quality assured to: ISO9001: 2008, ISO14001: 2004 and 18001: 2007

A.G.A. Group, MMG, MHP and AGACES are trading styles of A.G.A. Bio-engineering Systems Limited.

Merton Hall Ponds, Merton Thetford, Norfolk. IP25 6QH

T: 01953 886824

E: info@agagroup.co.uk

www.agagroup.co.uk



Ecology and Land Management Consultants

The information set forth in our literature reflects our best knowledge at the time of issue. This information is subject to change arising from new developments and findings. We do not undertake any liability for the use of our products and information. All trade is subject to our Terms and Conditions of Sale.