Golpla™ Product Brochure

Geosynthetics

www.geosyn.co.uk

Geosynthetics

Golpla™ Standard

Grass Reinforcement and Gravel Retention System



Creating Innovative Solutions with Outstanding Products

Golpla™ Solutions

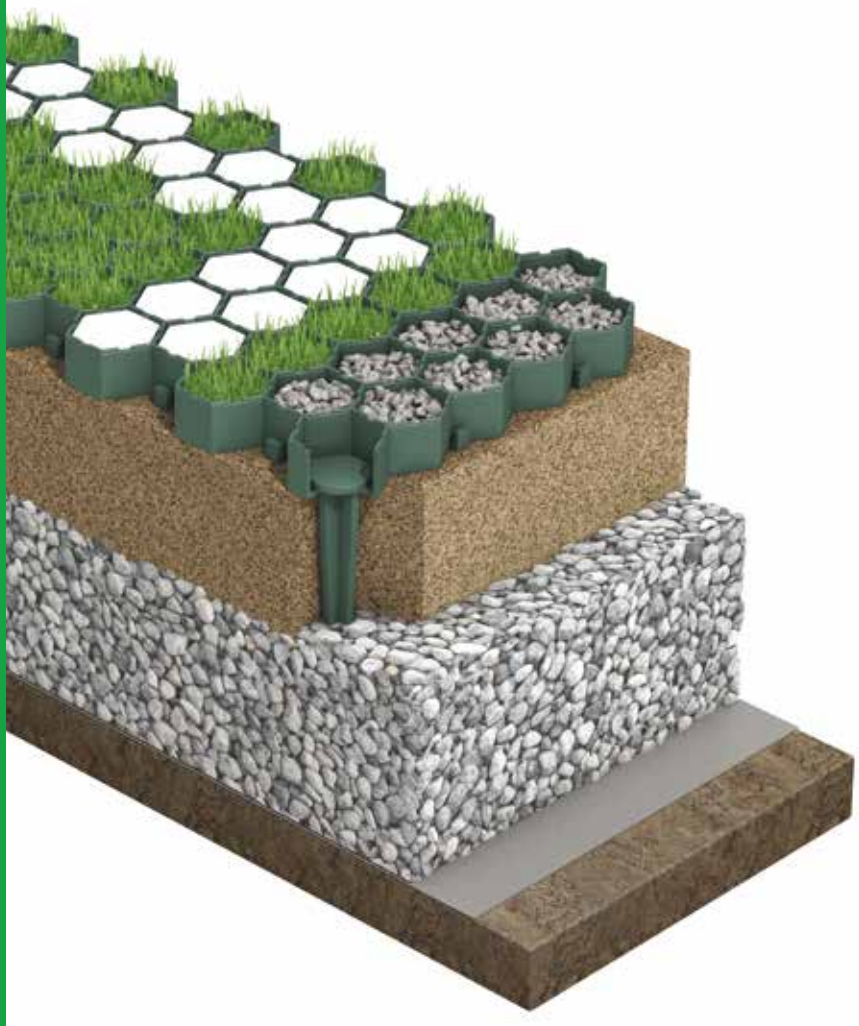
Golpla™ is designed to retain gravel and reinforce grass from regular vehicle or pedestrian traffic.

Golpla™ offers a range of landscaping solutions including Pre-Grown grass. In addition, comprehensive engineering and technical advice is available along with on-site support if required.

Combined with Cellweb®, Golpla™ offers a total solution for tree root protection areas (RPA's). Parking and access roads can be created in woodland areas preventing over-compaction of the sub-soils and roots.

Whether grass or gravel filled, Golpla™ offers well drained, high traction erosion resistance for all types of applications.

- **Pre-Grown**
- **Grass Reinforcement**
- **Gravel Retention**
- **Erosion Control**



Key applications

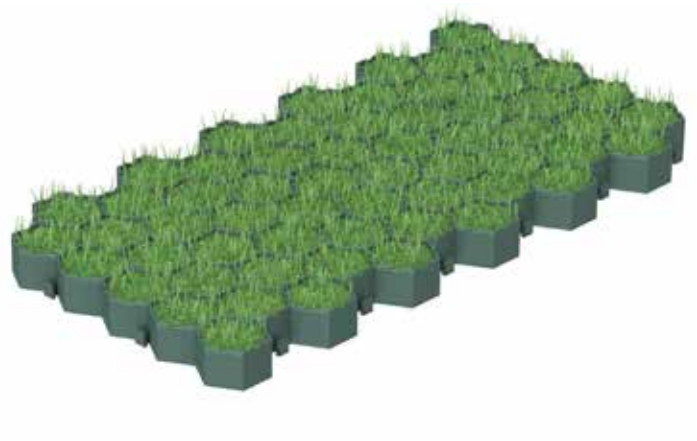
- Footpaths
- Cycle paths
- Access roads
- Car parks
- Caravan and campsites
- Sports facilities
- Emergency access*
- Wheelchair access

Features and benefits

- Pre-Grown grass option
- 95% infill area
- High infiltration and SuDS compliant
- Rapid, reduced-dig options
- Demarcation inserts available
- Contains recycled plastic
- Minimal simple maintenance

*Depends on application, contact Geosynthetics Ltd for advice. Not suitable for Quicklay™



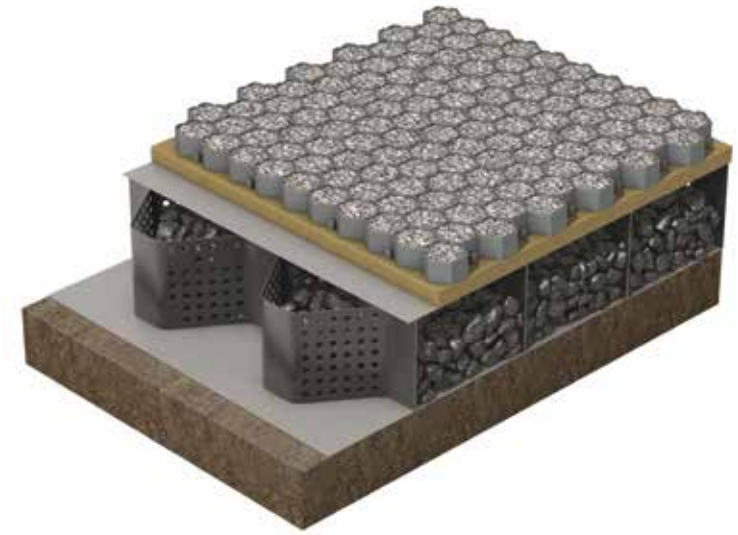


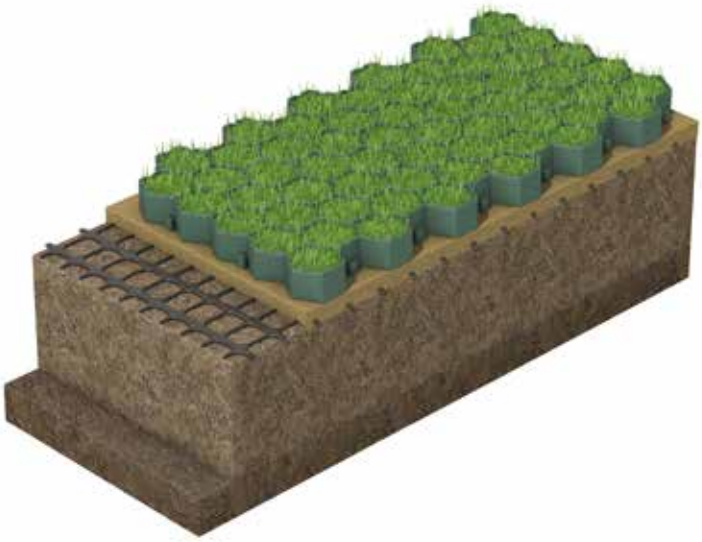
Golpla™ Pre-Grown solution

Pre-Grown Golpla™ offers a unique mature grass solution with units arriving to site with grass already established in the system. This can be installed throughout the year and accessed much earlier than traditional soil and seed systems. See page 7.

Golpla™ with Cellweb® TRP - Tree Root Protection solution

Combined with our Cellweb TRP® system, Golpla™ offers a permeable surface that complies with BS 5837 and Arboricultural Practise Note (APN) 12 guidelines. See page 9.





Golpla™ Quicklay® solution

The Golpla™ Quicklay™ solution is a rapid, minimal excavation installation option for sites with high CBR ground conditions. See page 8.

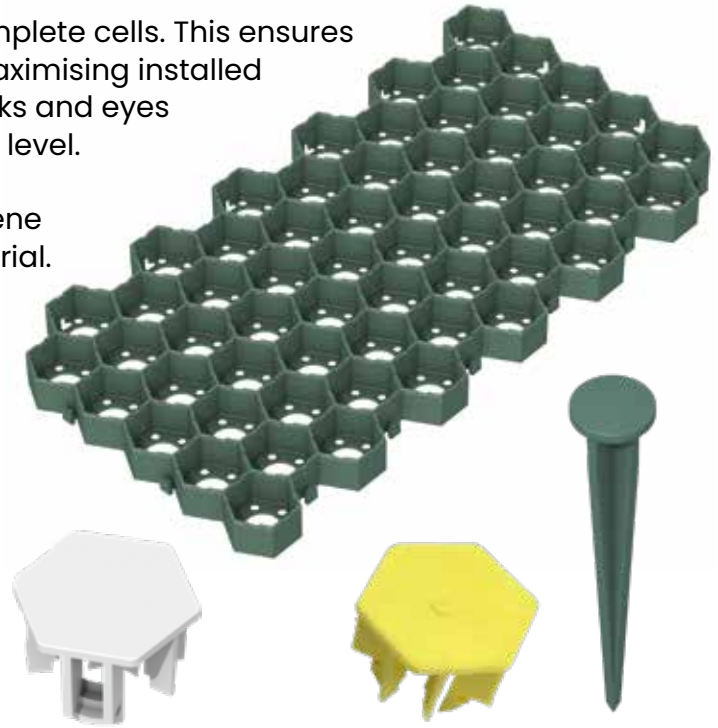




Product data

Golpla™ units are precision-manufactured and rectangular shaped. They link together to form a continuous reinforcement and erosion control system.

Each piece is an integral unit with no incomplete cells. This ensures that there is a double wall at each joint, maximising installed strength. The interlocking system, with hooks and eyes assists the installer in maintaining line and level.



Golpla™ is manufactured from polypropylene co-polymer which is a 100% recycled material. The materials are tolerant to thermal expansion but expansion joints are required to allow for temperature fluctuations especially in warmer weather.

Standards and compliance

Golpla™ complies with the requirements of the Flood and Water Management Act 2010.

Geosynthetics Ltd are accredited to ISO 9001 Quality Management Systems.

Golpla™ modules

Nominal dimensions	length 640mm x width 330mm x depth 38mm
Modules per m2	5.45
Weight per m2	5.5 Kg/m
Colour	Green
Cells per module	60 no. hexagonal cells - (Width 63mm)
Material	UV stable polypropylene (80%) and polyethylene (20%)
Standard packaging	168 units shrink-wrapped on pallets, each measuring approximately 1.2m x 1.1m x 0.95m, weighing approximately 180kg
Pallet coverage	Each pallet will cover 30.83 square metres
Golpla® securing nail	245mm long HDPE, round head to fit through base of cells
Demarcation inserts	White or yellow hexagonal shape to fit in cell with anti-vandal locking system

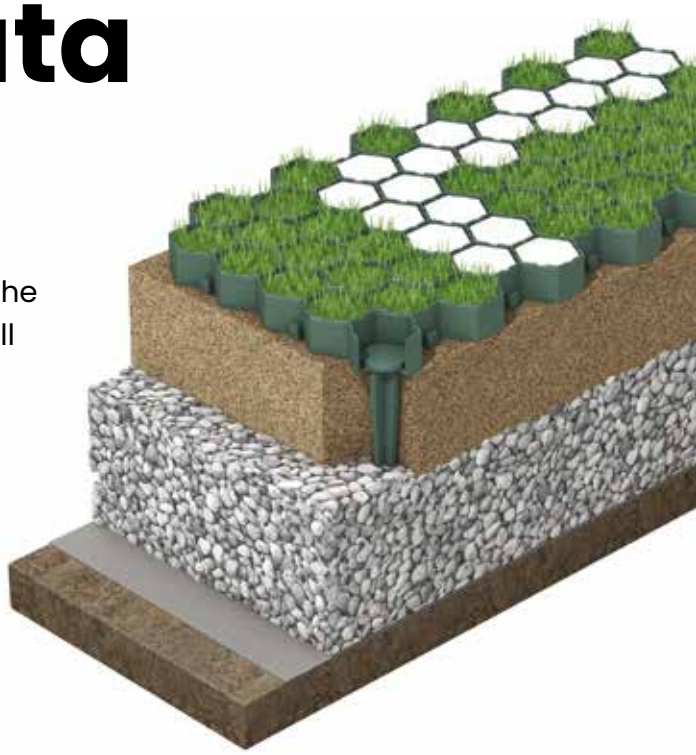


SuDS applications

Golpla™ is suitable for inclusion in applications where high infiltration is necessary as part of SuDS (sustainable urban drainage system) schemes. National SuDS standards are implemented where development requires planning consent from a Local Authority Suds Approving Body (SAB), increasingly part of local planning requirements.

Golpla™ systems help control run off, do not affect water quality and can form part of larger rainwater water collection and discharge systems.

Sub-base data



Golpla™ standard system

Golpla™ is suited to a wide range of applications. The system is ideal for general trafficking use and for all forms of architectural landscaping.

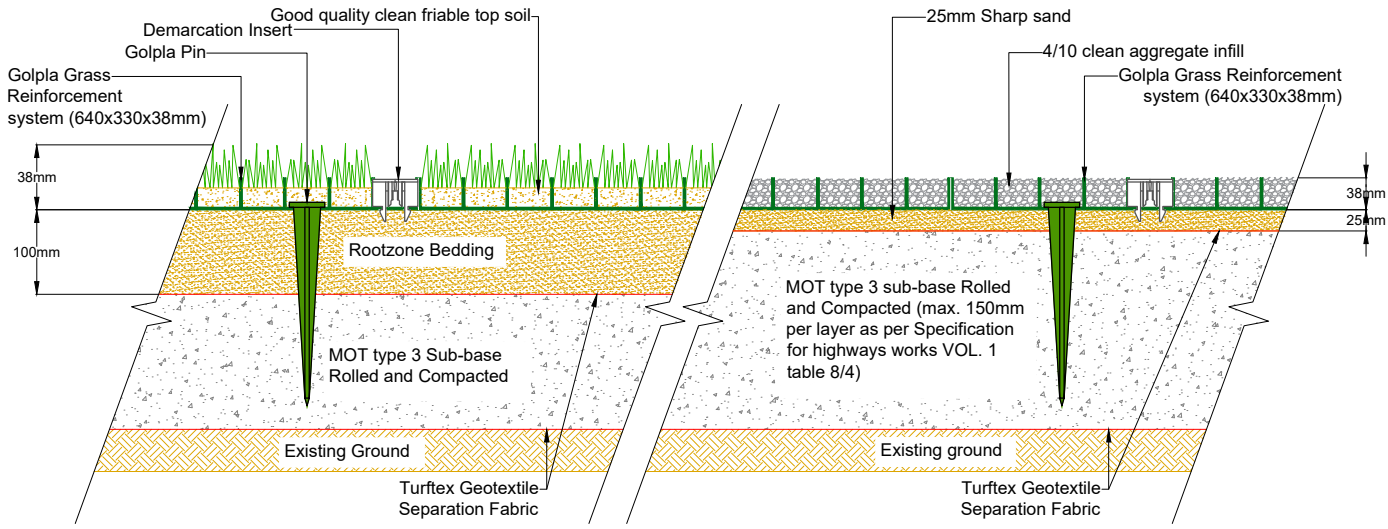
This includes car parking areas, lay-bys, access roads and other forms of vehicular or pedestrian hard standing.

Designing sub-bases for Golpla™

Design of the sub-base is based on the anticipated loadings and the existing ground conditions. Golpla™ is suitable for both 'Green-Field' and 'Brown-Field' sites.

Geosynthetics Ltd can provide complimentary engineering advice on sub-base depth.





Sub-bases for grass



Sub-bases for grass

The sub-base will typically consist of a 200mm thick layer of well compacted free-draining stone (MoT Type3) followed by a 100mm layer of Rootzone.

Golpla™ is then laid and consolidated with a vibrating plate and loose filled with clean friable top soil and seeded.

It is important not to overfill the modules or to compact the soil within them.

As all major seed houses agree, good grass requires a minimum of 125mm of growth medium in which to thrive. Without an adequate depth, grass cannot survive prolonged dry weather.

In the case of car parking, this problem is further compounded by the shade created by parked cars.

Golpla™ and Rootzone are specified together to give the optimal depth to permit excellent grass growth, whilst remaining stable and offering one of the shallowest excavation requirements on the market.

Contact us today to receive FREE engineering advice for your specific project needs!

Sub-bases for gravel

The sub-base would typically be 200mm of well compacted free-draining stone (MoT Type 3), binded with 25mm of grit/sharp sand followed by Golpla™. The gravel fill should be 4 - 10mm angular hard stone (avoid soft or self-binding materials).

Unit 3, Hinckley Park, Avery Way, Hinckley, Leicestershire, LE10 3FF | Tel: 01455 617 139 | sales@geosyn.co.uk





Golpla™ Pre-Grown system

Encouraging grass growth is essential to success. Uniquely within the grass reinforcement industry, Geosynthetics Ltd supply units Pre-Grown with established grass. Produced to order, Golpla™ Pre-Grown contains 4 types of grass as standard but can be made-to-order with specific varieties to suit any application (terms and conditions apply).

Orders for Golpla™ Pre-Grown are processed to synchronise with the site installation schedules so that the right quantities of palletised product are available.

In a matter of weeks (not months, as with seed) Golpla™ Pre-Grown is ready for use. It helps contractors to complete the work faster and gives clients the instant aesthetics from day one.

Golpla™ Pre-Grown is only available in units size 640mm x 330m x 38mm deep and can be used for conventional installations, as well as the Golpla™ Quicklay™ solution.



Key Benefits

- Mature grass from day one
- Eliminates soil and seeding
- Reduces construction time
- Can be installed all year round
- No seed germination issues
- Better grass coverage
- Reduces chance for weeds to establish
- Ready for use in shorter time frames
- Reduces maintenance after installation

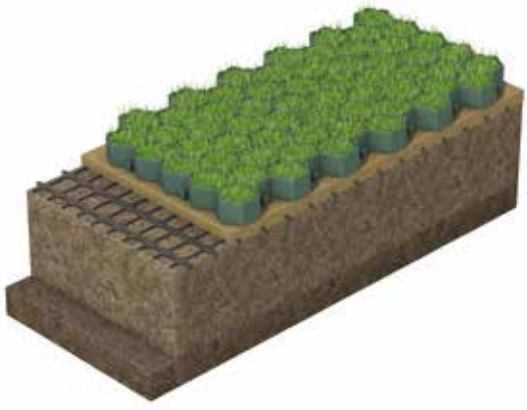
Golpla™ Quicklay™ solution

Developed by Geosynthetics Ltd to reduce sub-base depths. Sites must be for occasional use with firm, well draining ground and a high CBR strength (6-8%). Engineering advice is available.

Quicklay™ construction requires minimal excavation, often just the existing surface vegetation and some topsoil. This can be used on site instead of removal to tip and reduces disposal costs.

The Quicklay™ Geogrid is installed beneath a coarse grit sand or Rootzone. Golpla™ units are then positioned, secured and filled with soil and seed, a 4-10mm angular gravel or alternatively Golpla™ Pre-Grown units.

Depending on the layout, the edges can be retained by back filling with soil or held in place with treated timbers.



Key Benefits

- Great for occasional use areas
- Minimal surface excavation
- Reduced construction depths
- Cost savings on disposal of waste
- No sub-base stone required
- Easy access to underground services
- Minimal maintenance once grass established





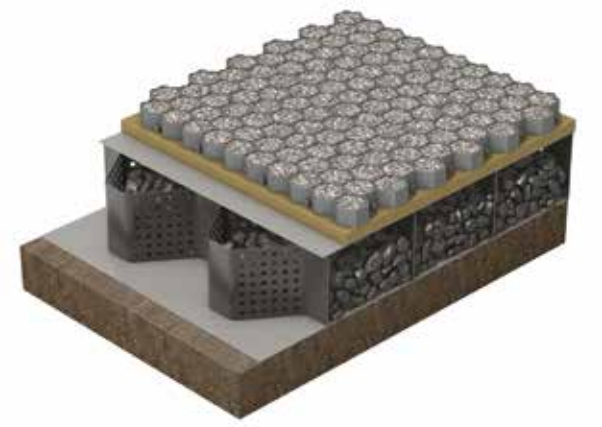
Golpla™ with Cellweb® TRP - Tree Root Protection solution

Golpla™ is not a recognised tree root protection system. However it does provide an extremely permeable surface which is ideal for roads and parking in root protection areas (RPA's).

By combining it with Cellweb® TRP, Geosynthetics Ltd has created a solution to assist designers in overcoming access issues.

A Cellweb® sub-base will fulfil the requirement for the construction of new hard surfaces within RPA's (BS 5837 and APN12)

Geosynthetics Ltd's engineering team can provide site specific Technical Recommendations for this type of application.



Key Benefits

- Tree root protection system
- Appropriate for 'No Dig' situations
- Prevents over-compaction of the sub-soils
- Suitable for weak ground conditions
- Extremely permeable surface
- Excellent lateral stability

Case study:	**Royal William Yard**
Client:	AtelierBUILD
Project details:	Royal William Yard was designed by Victorian architect Sir John Rennie and constructed between 1825 and 1831. Steeped in history, the site contains the largest collection of Grade 1 listed military buildings in Europe. The site has lots to offer visitors with a variety of high-end commercial and residential uses including leisure, office and retail. With the popularity of the location, car parking was a becoming a major issue for the site operator. They appointed Hydrock Engineering to source a solution. Aside from the necessity for a natural grass surface, some of the parking areas were quite steep and there were several mature trees that required protection. Due to its proven track record, the Golpla™ Pre-Grown and Cellweb® Tree Root Protection systems were specified for the project. Work to clear what had previously been an old neglected cottage garden started in October 2014 and a stone sub-base was installed. Grass surfacing was favoured for the parking areas with a coloured asphalt road linking the areas together. Geosynthetics visited site regularly during November and December to offer technical support to the installation teams. Following a trouble-free installation, the grass quickly began to establish and after some fertiliser was applied, it flourished despite the low winter temperatures. The project was completed in January 2015 and the site was opened for use the following month, by which time the Golpla™ pre-grown was fully established. Using Golpla™ Pre-Grown provided a consistent grass finish without germination issues and its natural aesthetic set the desired tone for the site's many visitors.

Maintenance & Repair

The Golpla™ grass and gravel reinforcement system is designed to need minimal maintenance but the following should be carried out periodically to ensure the surface is safe and to preserve its appearance.

For grass filled areas:

- Cut the grass as required during the growing season. Keep blades above their lowest setting to avoid clipping the Golpla™ pavers. Remove grass cuttings to prevent any compaction in the surface.
- Apply a fertiliser in the Spring and Autumn to keep the grass healthy and at other times as required.
- Water in times of drought.
- Do not apply road salt during Winter months.
- Any patches that appear can be re-seeded with a top dressing.

For gravel filled areas:

- Top up any cells with 4 – 10mm angular gravel when required.
- Any build-up of gravel where vehicles have been cornering should be swept back into the units.
- Ensure the expansion gap is maintained.

Technical Services

Geosynthetics Ltd can provide free technical support on all Golpla™ projects from concept right through to construction.

The engineering team can offer site-specific solutions to provide clients with the most cost effective and environmentally sympathetic results. Technical Recommendations will provide preliminary calculations and CAD details showing a range of build ups for each of our design proposals.

On site support:

Geosynthetics provide an easy to follow installation guide for Golpla™ but free onsite support is also available to clients and contractors who would like additional guidance.

Geosynthetics

INVESTORS IN PEOPLE®
We invest in people Gold

This brochure is produced to give an example of the products we supply and how, subject to your own testing, our products may be used. Nothing in this brochure shall be construed so as to make any ascertain or give/constitute any warranty as to specification or the fitness for purpose of any of our products in respect of any specific job. You should satisfy yourself through your own testing as to the suitability of our products for any specific purpose and rely solely on such testing and/or the advice of any professional(s) you commission. While we try to ensure as far as possible that all information given in this brochure is accurate at the time of print, information and examples given in this brochure are by way of illustration only and nothing contained in this or any other promotional literature produced by Geosynthetics Limited shall in any way be binding on us or constitute any offer or contract with you or shall be relied upon by you as a statement or representation of fact.

Version 4. 30.10.26