

**CellWeb**<sup>™</sup> Confinement Systems



Geosynthetics Limited

### **CellWeb**<sup>™</sup>

CellWeb™ Confinement Systems





Initially developed by the U.S. Army Corps of Engineers to construct unpaved roads over weak ground, CellWeb™ dramatically improves the performance of infill materials across a range of applications including:



#### **Applications:**

- Load support
- Erosion control
- · Retaining walls
- · Channel protection
- · Tree root protection

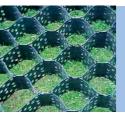
CellWeb<sup>™</sup> is a three-dimensional cellular confinement system manufactured from high-density polyethylene (HDPE) strips that are ultrasonically welded together to create a strong, lightweight expandable panel.

Its unique hoop strength and interconnecting cell walls form a durable composite mattress that can be filled with common materials for the most demanding load support and erosion control applications.

As the distributor for CellWeb<sup>™</sup> in the United Kingdom, Geosynthetics Limited can provide next day delivery to site as standard from stock.

# Versatile, effective and economical CellWeb™ gives you the following benefits:

- Savings of up to 50% on infill materials compared to other load support systems.
- · Reduces the need for excavation.
- · Reduces sub base thickness.
- Simple, speedy installation saving on construction costs.
- · Environmentally friendly.
- Protection for germination on vegetated slopes.



## Quality assurance

### Certified quality

Cellweb<sup>™</sup> is manufactured in accordance with an ISO 9001 Quality Management System with perforated walls, and a comprehensive range of cell diameters and depths. The perforated system improves the frictional interlock of infill material giving greater stability and facilitating lateral drainage.



# Civil engineering, construction and landfill:

- Road/rail stabilisation
- Pipeline/sewer support
- Temporary site access
- Structural supports
- Foundations
- Car parks
- Retaining walls
- Footpaths
- Tree root protection

#### **Erosion control:**

- Slope protection
- Slope stabilisation
- · Channel lining
- River lining
- Scour aprons
- Revetments
- Coastal protection
- Slipways
- Water crossings
- Balancing ponds

### Landscape architecture:

- Tree root protection
- Driveways
- Footpaths
- Grass car parks
- Maintenance
- Cart paths
- Slope protection



Geosynthetics Ltd is committed to offering the best solutions for soil stabilisation, erosion control, drainage and environmental protection problems.

Well trained staff are always available to discuss which materials are best suited to any particular application.

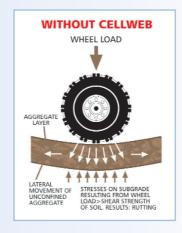
### Product function

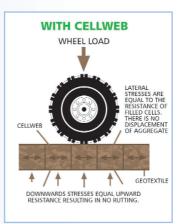


Millions of square meters of CellWeb™ systems have been successfully installed across the globe, answering many of today's challenging technical design problems.

### Load support

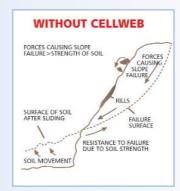
Providing reinforcement to infill materials,
CellWeb<sup>™</sup> performs like a semi-rigid slab. This
effectively distributes loads laterally reducing
sub grade pressures. This means that CellWeb<sup>™</sup>
can help you to reduce the sub-base thickness
by up to 50% saving time and material costs.

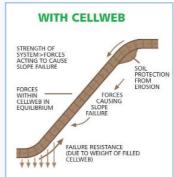




# Erosion control and slope stabilisation

CellWeb<sup>™</sup> confines and reinforces vegetation on steep slopes by increasing the soils natural resistance to erosion and protects the rootzone layer during germination. Similarly on nonvegetated slopes it prevents the down slope migration of granular infill resulting in greater stability. Perforated CellWeb<sup>™</sup> panels increase lateral drainage and reduce hydrostatic build up.





### Please call 0870 850 1018

or email sales@geosyn.co.uk for further information.

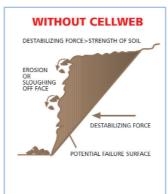
Wide product range

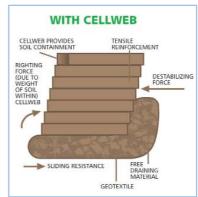
Large stock holding

Next day delivery

### Retaining walls

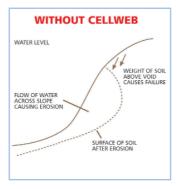
When used to construct a retaining wall, CellWeb<sup>™</sup> functions as both the face protection and the reinforcing element. Its structure confines the soil and prevents it from falling or being eroded, resulting in a longer life and less maintenance. CellWeb<sup>™</sup> panels significantly increase the thickness of the wall; which in turn increases the weight of the wall and its retaining ability.

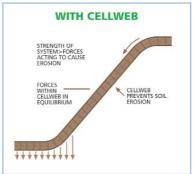




### Channel protection

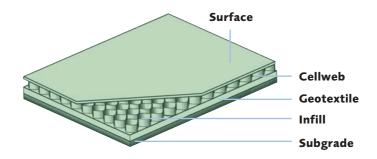
CellWeb<sup>™</sup> reinforces and protects channels, riverbeds and swales by increasing the shear strength of the selected infill. Water is directed above the infilled cellular structure, leaving the rootzone undisturbed, providing a more attractive and cost effective solution to concrete lined channels. In watercourses with high velocities a granular or concrete infill can be used to further increase performance.





### Tree root protection

Because CellWeb<sup>™</sup> reduces the need for excavation, this makes it ideal for stabilising access roads and car parks around tree root systems. What's more it reduces compaction of sub soils above the roots and promotes the migration of water and nutrients, ensuring the long-term preservation of the tree itself.



**Geosynthetics Ltd** is a leading distributor of geosynthetic materials in the UK

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Onsite support

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# Technical specification



#### **Product Specifications**

Properties	Standard Cell	Large cell
Material	Virgin HDPE	Virgin HDPE
Wall thickness	1.25mm	1.25mm
Seam welding	Ultrasonic to 100% of seam length	Ultrasonic to 100% of seam length
Cell depth	75, 100, 150, 200 and 300mm	75, 100, 150, 200 and 300mm
Width of expanded panel	2.56m	2.56m
Length of expanded panel	8.1m	13.72m
Cell diameter (expanded)	259 x 224mm	508 x 475mm

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### Please call - 0870 850 1018

or email sales@geosyn.co.uk for more technical advice and further information.

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