Prest®

GEOSYSTEMS®

GLOBAL LEADER • GLOBAL PARTNER

creating

sustainable

environments®

GEOWEB®

cellular confinement system

PRODUCT CATALOG

our commitment:

providing the highest quality products/solutions

solving challenging soil stabilization problems

GEOWEB®

MADE IN THE USA

For the most advanced soil stabilization technology today, rely on the proven Presto GEOSYSTEMS® GEOWEB® geocell system for solving challenging soil stability problems.

Genuine GEOWEB®

THE ORIGINAL CELLULAR CONFINEMENT SYSTEM

Presto GEOSYSTEMS® is the original developer of the geocell technology and leads the industry in research and development. The result is meaningful product improvements, innovative features, advanced engineering methodologies and proven field results that provide the most cost-effective and long-term solutions to soil stabilization problems. Innovations continue today to provide you with sustainable, high-performing and lowest-cost solutions.

HIGH-QUALITY PRODUCTS AND SOLUTIONS

With Presto GEOSYSTEMS®, you'll receive the same high quality products, solutions and support that you did over 30 years ago. GEOWEB® sections are manufactured from high-quality polyethylene to achieve consistent and maximum seam strength and overall system performance. Product quality is assured through the quality management system certified to ISO 9001:2008 International/Standards. The GEOWEB® system carries a CE marking based on conformance with EU harmonized standards.

HIGH PERFORMANCE SOIL STABILIZATION

The GEOWEB® system significantly improves the performance of soils by confining and stabilizing them in the system's high-strength network of interconnected cells. The 3D system is an economic and effective solution to challenging soil stability problems in load support, slope, channel, and shoreline protection, and vegetated retaining wall applications.

PRESTO'S VALUE SERVICES

- DESIGN SUPPORT: A complimentary project evaluation service is available to support your project designs.
- CONSTRUCTION SUPPORT: Contractor training or site supervision is available to support your project installations.

INFILL OPTIONS

A variety of infill materials can be used based upon details of the specific project/problem:

- topsoil with various selected vegetation
- aggregates from sand and gravel to larger rock or stone
- concrete of various strengths and surface finishes
- on-site available fill
- combinations of the above to meet project conditions

GEOWEB®
CHANNEL PROTECTION

The GEOWEB® system provides a wide variety of economical, flexible protection treatments for open channels and hydraulic structures. The system provides stability and protection of channels exposed to erosive conditions ranging from low-to-high flows either intermittent or continuous.

- Greatly improves the hydraulic performance of conventional protection materials such as aggregate, rip-rap and vegetation by confining them within the cellular structure.
- With concrete infill, is a flexible and long-lasting armored channel lining, at a lower cost than articulating block systems.
- Can be designed for specific site conditions based upon compatibility with local environmental, ecological and aesthetic requirements, maximum anticipated flow, and associated hydraulic stresses.
- Surface roughness and hydraulic efficiency of the lining system can be changed to control flow.
- Subgrade drainage requirements and deformation potential within the structure can be addressed.

TYPICAL APPLICATIONS

- swales and drainage ditches
- stormwater diversion or containment
- process water channels or containment
- spillways/down chutes/drop structures
- culvert outfalls
- intermittent or continuous/low-to-high flow channels

environmental benefits

- With permeable infill, the GEOWEB® system is a natural Low Impact Development (LID) / Best Management Practice (BMP) solution to stormwater challenges, reducing runoff and managing stormwater on-site.

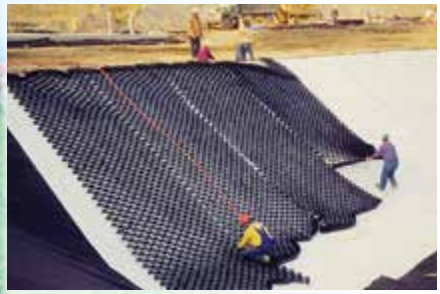
GEOWEB®
SLOPE & SHORELINE PROTECTION

The GEOWEB® slope and shoreline protection system confines, reinforces and restrains the upper soil layer and infill controlling down-slope movement and slippage due to hydrodynamic and gravitational forces.

- Provides effective slope protection and structural confinement of topsoil/vegetation and granular materials such as sand, gravel and larger rock or stone.
- Becomes a flexible concrete mat with built-in expansion joints when cells are infilled with concrete.
- Creates additional stability by integrating tendons on steeper slopes and shoreline embankments or when a geomembrane or hard soil/rock surface prevents anchoring with stakes.
- Allows embankments to be steeper than when unconfined, reducing use of valuable land space.

TYPICAL APPLICATIONS

- cut or fill embankment slopes
- shoreline revetments
- abutment protection
- stormwater/waste water lagoons
- containment dikes and levees
- geomembrane protection
- landfill linings and covers
- dam faces and spillways



LEED® Green Building Credits

- The GEOWEB® system is an eco-friendly product that contributes to USGBC LEED® green building credits in the categories for reducing site disturbance, stormwater quantity and quality control, reducing the heat island effect (non-roof) and regional materials (varies by application).

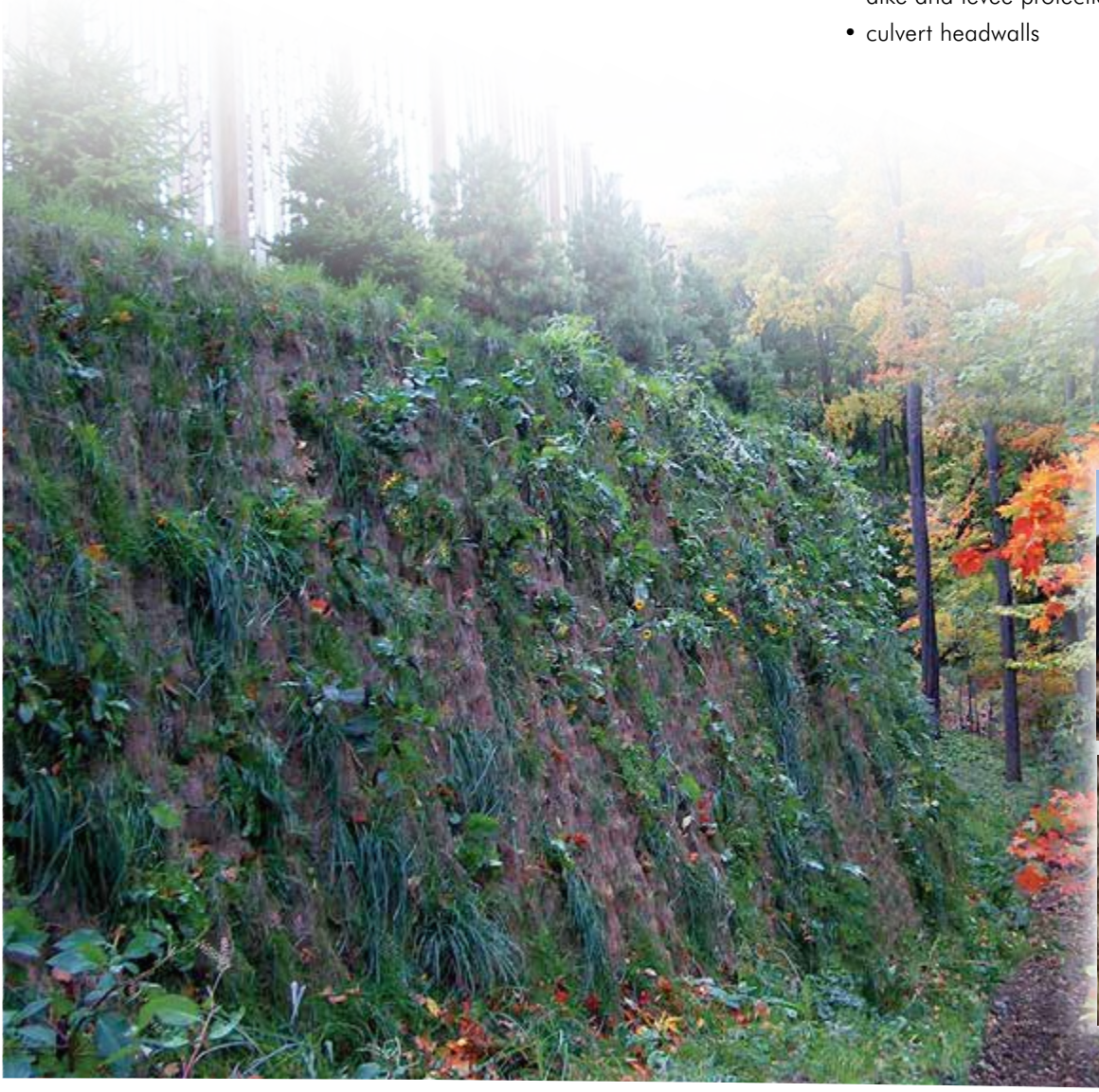
GEOWEB®
RETAINING WALLS/EARTH RETENTION

The GEOWEB® system, when layered, becomes an economical retaining wall system meeting all project-specific structural requirements. The system allows for construction flexibility and provides aesthetics through a completely vegetated face. Horizontal terraces are formed where vegetation can flourish in the exposed outer cell infill. The system captures rainwater and controls groundwater evaporation, creating a more natural environment for vegetation.

- Maintains structural stability against all loading through its mass and frictional values of the infill, even in soft soil environments.
- Meets site challenges when subgrade soils are compressible or construction is in difficult-to-access locations.
- Creates blending with any environment through use of tan, green or special-colored facia panels.

TYPICAL APPLICATIONS

- bioengineered walls
- steepened embankments
- dike and levee protection
- culvert headwalls
- landscape development walls
- vegetated channel structures
- sound barriers



low-impact development

- The highly permeable GEOWEB® wall surface is a natural low impact development (LID) solution by allowing stormwater collection through the vegetated outer fascia and reducing runoff.

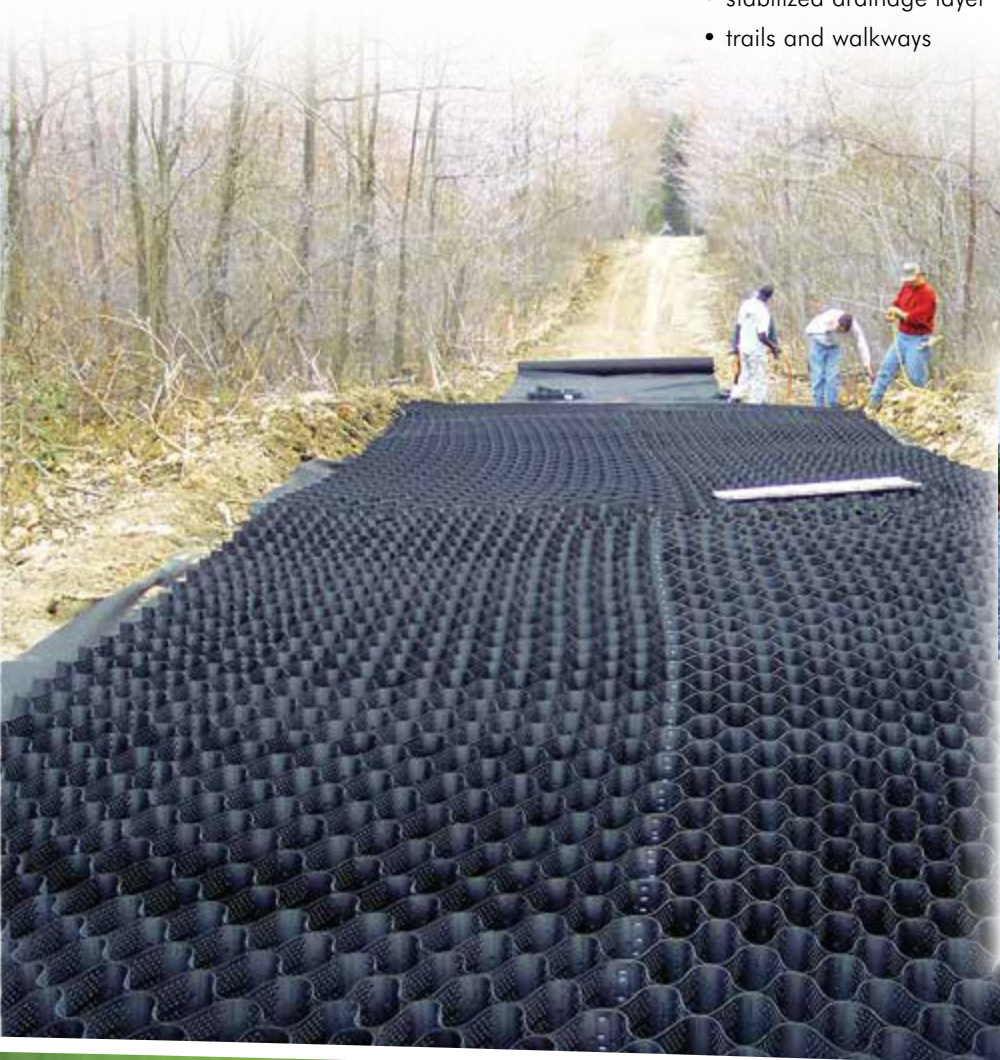
GEOWEB®
LOAD SUPPORT

The GEOWEB® load support system stabilizes the selected infill and provides economical solutions to unstable surface or base problems in three key areas: 1) a load distribution system over weak soils, 2) base stabilization for paved surfaces and 3) surface stabilization for unpaved surfaces.

- Significantly minimizes surface rutting.
- Distributes loads laterally and reduces vertical deflection and subgrade contact pressures.
- Controls shearing and lateral movement of the coarse and permeable infill material.
- With open aggregate infill, reduces stormwater runoff and creates on-site water detention/ retention basin.
- In most cases, the GEOWEB® system doubles the effective structural number for load support, reducing base requirements by half.

TYPICAL APPLICATIONS

- site access roads
- permeable pavements
- roadway shoulders
- intermodal/port facilities
- transportation/storage yards
- stabilized drainage layer
- trails and walkways
- track ballast and subballast structures
- stabilized base for asphalt or modular block pavements
- boat ramps/low water crossings
- foundation mattresses and pipeline protection



stormwater benefits

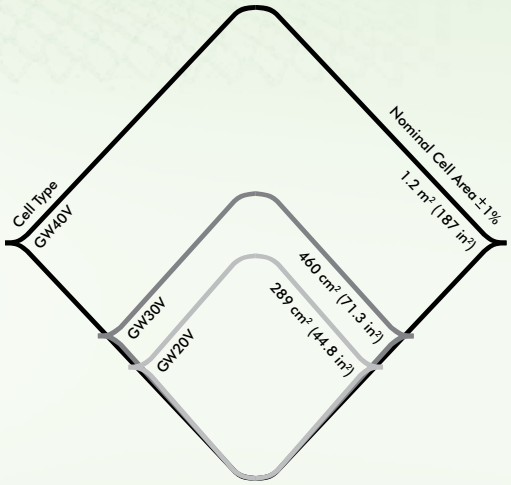
- With permeable aggregate, the GEOWEB® system reduces the need and costs for additional stormwater collection/storage systems or stormwater ponds by performing as an on-site stormwater storage "basin".

GEOWEB® system standard sizes

GEOWEB® sections are available in various cell types and depths, and section lengths to most economically meet project requirements.

Cell Type	Section Width	Section Length Range Cells Long: 18, 21, 25, 29, 34	
	Variable	Minimum	Maximum
GW20V	7.7 ft–9.2 ft (2.3 m–2.8 m)	12.0 ft (3.7 m)	27.3 ft (8.3 m)
GW30V		15.4 ft (4.7 m)	35.1 ft (10.7 m)
GW40V		25.4 ft (7.7 m)	58.2 ft (17.8 m)

Available cell depths	3 in (75 mm), 4 in (100 mm), 6 in (150 mm), 8 in (200 mm)
Cell size and depth are determined by the details of the application, problem or desired solution. Refer to the GEOWEB® material specification for more information.	



GEOWEB® CELL SIZES

system components & contractor tools

The following components may be part of the overall GEOWEB® solution to meet engineering requirements and to facilitate and expedite construction:

ATRA® KEY CONNECTION DEVICE

Designed for quicker connection of GEOWEB® sections, the exclusive ATRA® key device reduces installation costs and provides 3X stronger connections than staples. (1)

TENDONS

Tendons may be required and are available in various tensile strengths to meet design requirements.

- Provide additional stability against gravitational, hydrodynamic, and buoyancy forces.
- Effective with high flows, or when a geomembrane underlayer or hard soil/rock prevents anchoring with stakes.

ATRA® ANCHORS

Contractor-friendly ATRA® Anchors reduce time and material costs during installation of the GEOWEB® system. (2 & 3)

- Easier to drive than J-hook stakes; improves installation productivity and uses less material.
- The ATRA® Driver makes driving anchors easy and fast, and causes less stress on workers. (4)
- Three styles are available, including corrosion-resistant.

ATRA® TENDON CLIP

The ATRA® Tendon Clip is an efficient load-transfer device to transfer loads from the GEOWEB® cell wall to the tendon. Fully engaged clips allow easier preassembly. (5)

1. ATRA® Key
2. ATRA® Anchors
3. ATRA® Anchors
4. ATRA® Driver
5. ATRA® Tendon Clip

comprehensive tools and services

Presto GEOSYSTEMS® and its distributors/representatives offer the most-complete services in the industry to support project design and installation requirements.

TOOLS:

- SPECMAKER® specification development tool
- Technical resources binder
- Engineering analysis/technical overviews
- Project case studies
- Construction instructions and videos

SERVICES:

Project Evaluation Service: We analyze specific project needs and provide recommended preliminary designs for each project.

Construction Services: Qualified on-site field support specialists can be available for construction training, and start-up installation supervision.

PRESTO GEOSYSTEMS® COMMITMENT — *To provide the highest quality products and solutions.*

Presto GEOSYSTEMS® is committed to helping you apply the best solutions to your soil stabilization problems. Our solutions-focused approach to solving problems adds value to every project. Rely on the leaders in the industry when you need a solution that is right for your application. Contact Presto GEOSYSTEMS® or our worldwide network of knowledgeable distributors/representatives for assistance.

FIND US | FOLLOW US

We are a global business with accessibility through a worldwide distribution network.

UNSURPASSED QUALITY

Presto's commitment to quality begins with manufacturing and continues through final installation.

- Quality management system certified to ISO 9001:2008 and has CE marking.
- Sections manufactured from high-quality polyethylene provide consistent and maximum seam weld strength.
- Materials engineered to established geosynthetic industry guidelines.
- Sections backed by a 10-year limited warranty.

DISTRIBUTED BY:

PRESTO | GEOSYSTEMS®
GLOBAL LEADER • GLOBAL PARTNER

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AP-4946 R6
JUNE 2017