



**PRESTO** | **GEOSYSTEMS®**

**STRENGTH. FROM THE GROUND UP.**

Since 1979



## **7 KEY FACTORS** to choosing the right geocell



Not All Geocells are Created Equal

**Material Quality • Application Experience**  
**System Components • Accredited Certification**  
**Design Support • Installation Support • CERTAINTY**

## Quality. Experience. Support. They all matter.

We all want the highest quality products, but are we willing to pay for them? We all want services included, but are we willing to pay for them? What happens if we settle for less than the highest quality materials and don't receive support for a product we know little about? Could we be putting our project at risk of failure?

Quality

**Following are the 7 most important Key Factors  
to choosing the right geocell.**

*System  
Components*

*Accredited  
Certification*

*Experience*

*Design Support*

*Certainty*

*Installation Support*

# 7 KEY FACTORS to choosing the right geocell



## 1. QUALITY

### The Geocell Material Is Suitable for the Project

**Quality correlates to seam strength. Your geocell project is only as strong as your weakest seam weld.**

Presto Geosystems co-invented the geocell technology and its GEOWEB® brand is recognized in the geosynthetics industry as the original high-quality, high-performance geocell.

For forty years, GEOWEB material has been manufactured from only the highest quality blend of High Density Polyethylene (HDPE).

- Presto prefers quality and publishes standard “minimum seam strengths” when others use “averages”.
- Presto follows stringent ISO and CE quality standards in the manufacture of GEOWEB sections to ensure consistency between each section shipped to the jobsite.
- Presto’s ISO and CE certifications are verifiable and certifiable.



### CAUTION:



Some manufacturers utilize low quality, inconsistent material, or even use geotextile fabric for their brand of “geocells”. These lower quality geocells do not have the same material

properties or design strength as the GEOWEB material and can lead to a project failure.







## 2. INTEGRAL COMPONENTS The Complete Solution Includes Proper Components

Integral components have a critical role in contributing to the overall design strength of the engineered solution. Presto's GEOWEB® accessories provide higher design strength than alternative methods. They are also designed to save contractors time and money during installation, and minimize the potential for incorrect installations.

### ATRA® KEYS



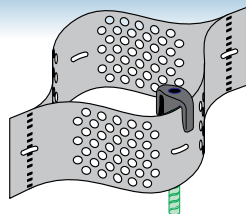
#### GEOWEB Connection Device.

ATRA keys, made from weather-resistant polyethylene, are 3 times stronger and 3 times faster than stapling. Easy installation: ATRA keys are inserted through adjoining GEOWEB cell walls, turned and locked for the most secure connection.

**! CAUTION:** Staples are subject to corrosion, ATRA keys are not! Operating a pneumatic stapler is cumbersome. When contractors do not place the correct number of staples per geocell connection, stress on those stapled seams over time can create potential for failure. See 1 & 3 below.

**! CAUTION:** Simply piecing together substitute geocells, tendons, connection devices, load transfer devices and anchors with unknown strengths and performance will not give the same design result!

### ATRA ANCHORS



#### Internal & Crest Anchors

Presto's ATRA anchors make a secure connection with the GEOWEB cell wall and are faster and easier to drive than J-hooks.

**! CAUTION:** J-hooks make a poor connection with the cell wall, protrude over the top of the cell wall, and are corrosive. See 2 below.

### TENDONS & ATRA TENDON CLIPS

#### Load Transfer Device

Presto's ATRA tendon clips make a secure connection with the GEOWEB cell wall for transferring loads from the tendon to the cell wall.



#### Support System

Tendons suspend the GEOWEB material over geomembranes, or hard surfaces without anchors. Presto uses industry-leading tendons, as tendon type and density are critical to the design strength.



**! CAUTION:** Other load transfer devices can become disengaged with the tendon and/or geocell cell wall, creating additional stresses that can lead to system failure.





### 3. EXPERIENCE

#### The Geocell Manufacturer has Extensive Application Experience

There is simply no manufacturer that has as much application experience as Presto.

- Presto has supported the design and construction of thousands of projects across a diverse world environment for 40 years.
- Presto and their representative network commit thousands of hours of free evaluation time each year to support engineers' designs.



#### ! CAUTION:

Some geocell manufacturers do not have a fundamental understanding of the technology or its limitations for the project application. Using their material can lead to failures.



### 4. CERTIFICATION

#### The Geocell Material Meets Accredited Industry Standards

Third party certification delivers confirmed and validated data that cannot be disputed.

- For over four decades, Presto has thoroughly researched and tested their GEOWEB® material performance at leading industry, accredited research/testing laboratories. The results are certifiable and are integrated into our project evaluation recommendations.
- We test at only the best! TU Clausthal Germany, Royal Military College of Canada, Sageos, Groupe CTT Group Canada, TCI AAR, Colorado State University (CSU), University of Kansas

#### ! CAUTION:

Be careful of geocell manufacturers who do not have results from accredited research/testing laboratories to back their material or performance claims.



## 5. DESIGN SUPPORT

### The Engineer Receives Proper Tools & Engineering Guidance

Geocells solve many of the world's most challenging soil stability problems, so extra caution should go into their designs.

Presto is committed to the engineer, and offers the most complete design support and resources in the industry:

- Complimentary project evaluation is a collaborative effort to ensure projects are designed to performance expectations.
- Full specification package includes CSI-format and material specifications, detailed CAD drawings and a quick specification building tool, SPECMaker®.



- Presto offers its GEOWEB MSE wall program (free licensed software) for engineers to design gravity and geosynthetic-reinforced walls.



### CAUTION:

Presto's evaluations are based solely on the material properties and tested performance of the GEOWEB material. Simply substituting alternative geocells for the same design can cause a failure.

## 6. INSTALLATION SUPPORT

### The Contractor Receives Proper Installation Tools & Training

When contractors are properly trained, it saves them time and money, and minimizes the potential for mistakes, improper installation and risk of system failure.

- Presto is committed to the contractor and provides detailed installation instructions, step-by-step drawings and videos.
- Pre-construction training and on-site field support is available from Presto or their qualified representatives.



### CAUTION:

Presto is the only geocell manufacturer that provides a complete offering of tools, training and field support to contractors. Improper installation can lead to a failure.





## 7. CERTAINTY

### Your Owner & Your Reputation are Protected

The most important reason to choose the right geocell is to protect your owner as well as your reputation!

You have worked hard on your design — from evaluating materials and comparing alternative methods and costs to ultimately choosing the GEOWEB® solution for your project.

At the end of the day, it's your design and your project. Stand behind your GEOWEB design and do not allow substitutions to risk the success of your project, or your reputation.



### CAUTION:

## DOES YOUR GEOCELL HAVE THESE 7 KEY FACTORS?

They could be the difference between project success or project failure.



**GEOWEB project.** Presto performs project evaluations, analyzes relevant project data such as slope angle and length, flow (velocity, depth), vehicle loading, and infill (type, weight), and recommends a solution to the engineer. Presto's distributors and representatives offer installation training and site supervision to the contractor. **Project Success.**



**Substitute geocell project.** Substitute geocells are often manufactured from inferior quality material that exhibits lower strength characteristics (e.g. seam strength). No project evaluation, no design collaboration and no contractor training or supervision can result in an improperly connected system in an improper application and with improper infill. **Project Failure.**



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They all matter.**



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Since 1979

670 N Perkins Street • Appleton, Wisconsin, USA  
800-548-3424 or +1 920-738-1328  
Email: [info@prestogeo.com](mailto:info@prestogeo.com) • [www.prestogeo.com](http://www.prestogeo.com)

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