PRESTO | GEOSYSTEMS®

GEOWEB®

Load Support System

Design Engineering Resource Package

LOAD SUPPORT

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Design Resources

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GEOWEB®

Load Support System

DESIGN HIGH-PERFORMANCE ROADS & PAVEMENTS

Transform fill materials to create stable roads, long lasting parking areas, and porous road shoulders with the GEOWEB® 3D load support system.

The soil confinement system eliminates problems resulting from unpaved road surface rutting, paved road subgrade material instability and torsional failure.

This engineering design package will equip you with tools & resources to design higher-performing roads & pavements.

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Design Resources
for your project

Learn About GEOWEB Load Support

See how the System Works

Learn how the GEOWEB 3D Stabilization System works—and how it can work for your project.

- Overview Brochure
- Visit our Photo Gallery
- See Project Case Studies
- Watch Webcast Presentations

Load Support Key Applications

UNPAVED ROADS & PAVEMENTS

BASE STABILIZATION

ROAD SHOULDERS

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Design Resources
for your project

COMPARE

GEOWEB 3D Stabilization to 2D Geogrids>>

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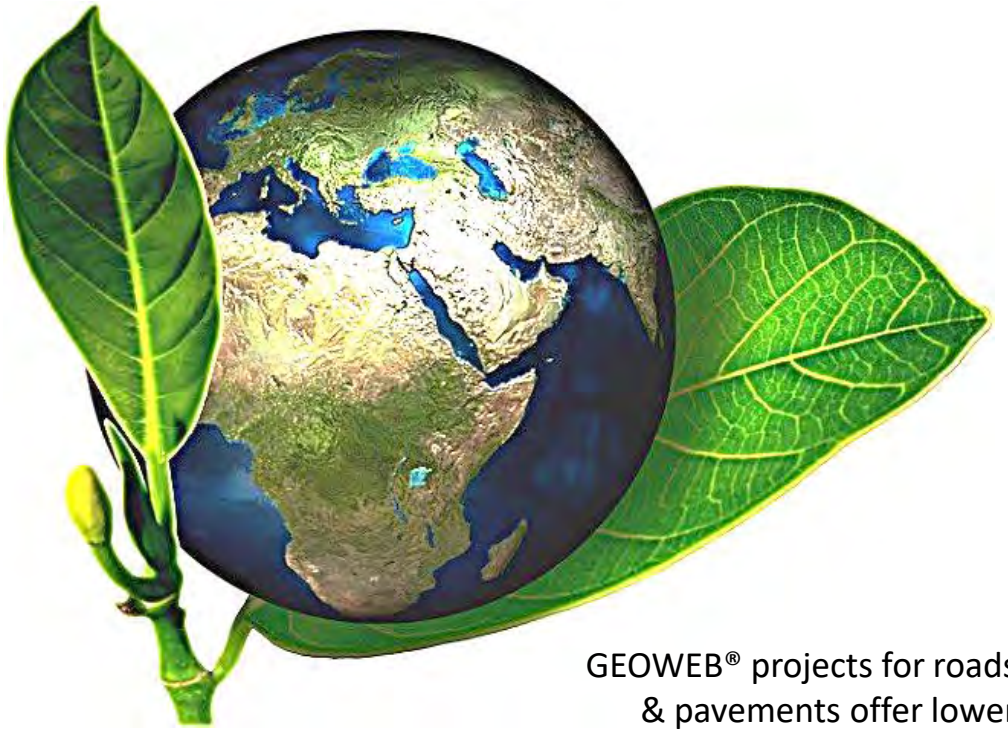
Design Resources
for your project



Environmental Benefits

Download the Green Sheet >>

GEOWEB® projects for roads & pavements offer lower environmental impact than alternative solutions.

Energy Use

Resource Savings

Land Use

Water Benefit

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Technology Roots

Development of 3D Geocells

Presto developed 3D geocells nearly 4 decades ago with the US Army Corps of Engineers. The original application was to provide fast access roads across dry sand beaches.

Since then, Presto has catapulted the geocellular technology into new landscapes, applications and markets.

The GEOWEB® system is the original—and most advanced geocell on the market.

- Learn about development of geocells >>

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Design Resources
for your project

Create a Specification

Fast & Easy Specification Tools

Create your own custom specification or use industry-standard specifications from ARCAT.com and CADdetails.com

SPECMaker® Tool

Create a Custom CSI Spec in Minutes

CSI Specification (Word doc)

Specification Summary

Industry Specifications

ARCAT

CADDetails

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CAD Detail Drawings

Design Resources
for your project

Cross-Section Drawings

Find all the drawing details you need to include in your contract documents.

CAD Drawings

Industry CAD Details

ARCAT

CADDetails

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Watch Videos

See Product in Action

[Visit our Video Gallery >>]

[Watch Simple Installation Video >>]

[See a Roadbase Project >>]

[See a Yard Stabilization Project >>]

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Free Project Evaluation

Design Resources
for your project

Assistance with Your Design

We can provide design support for your project.
Take advantage of our technology experience and let us perform a free evaluation for your GEOWEB® project.

Request Free Project Evaluation (online form)

Download the Request Form (Word fill form)

Surface Stabilization

Base Stabilization

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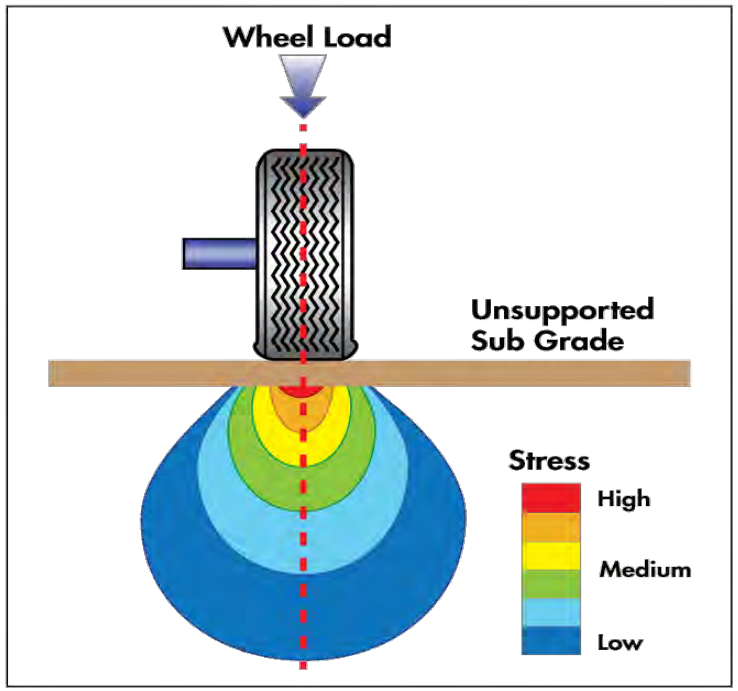
Technology Data

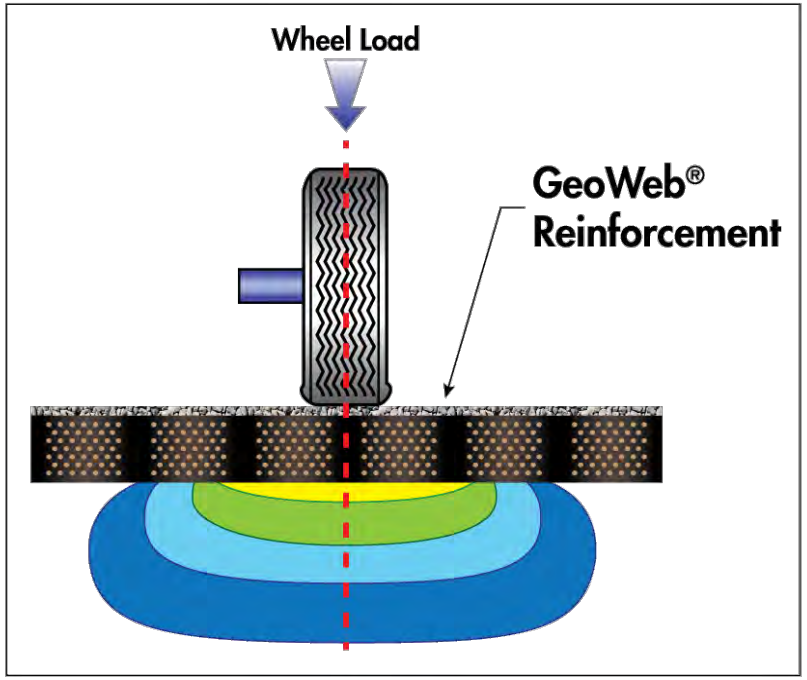
Design Resources
for your project

Evaluate how the 3D Confinement Technology Works

Learn about the technical details, and design considerations and methods of GEOWEB confinement.

Read Comprehensive Technical Overview>>





Under concentrated or distributed loads, the GEOWEB® 3D cellular structure confines infill material and controls shearing, lateral and vertical movement of the infill material.

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System Accessories

Design Resources
for your project

Fully Integrated for Performance

Ensure your project holds up under any condition.

GEOWEB® projects are designed with connection and anchoring components for a 'complete system' solution.

- Weather-resistant, high-strength ATRA® connection keys.
- Corrosion-resistant and weather-resistant ATRA® anchors.
- Fast anchor driving tools.

See How the System Components Work

Transforming Markets & Industries

Learn how the GEOWEB® 3D soil confinement system's versatility and capabilities will benefit your project's performance in a wide range of applications and industries.

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Heavy Loading

Site Access Roads

- Design fast-built access roads to sites, even in remote areas.
- Use salvaged or low-quality aggregate fill and up to 50% less base.
- One layer solution, even over soft subgrades.

LEARN MORE

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Heavy Loading

Roadbase

- Design pavements to reduce deflection and settlement that cause rutting, potholes and pavement degradation.
- Build a stronger base that extends pavement life, even over soft subbase soils.
- Use 50% less cross-section through the strength characteristics of confined aggregate.

LEARN MORE

Base Stabilization

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Heavy Loading

Oil & Gas

Roads & Pads

- Build access road to energy sources that are fast to deploy, even to remote locations.
- Use salvaged or low-quality aggregate fill.
- All-weather HDPE material allows construction 365 days a year.

LEARN MORE

Surface Stabilization

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Heavy Loading

Wind Energy

Roads & Pads

- Support heavy trucks and equipment across undeveloped, soft ground for wind farm construction and maintenance.
- Create stable staging areas and crane pads for wind tower and turbine installation.
- Use up to 50% less fill—even low-quality aggregate or sand.

LEARN MORE

Surface Stabilization

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Heavy Loading

Airports

- Design to stabilize pavement base or reinforce shoulders for runways and taxiways.
- Reduce deterioration of overlying asphalt and concrete pavements.
- Create a stabilized drainage layer to capture de-icing liquid runoff.

LEARN MORE

Base & Surface Stabilization

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Heavy Loading

‘Power’ Concrete
Roads & Pavements

- Design stronger concrete roads and pavements that exhibit the flexibility of articulating permeable pavers and the strength of hard-armored concrete slabs.
- No formwork and reinforcement required.
- Reduce pavement costs 15-25%.

LEARN MORE

Surface Stabilization

PRESTO | GEOSYSTEMS®

Heavy Loading

Mine Haul Roads

- Design haul roads to support heavy loaded mining trucks with faster cycle times, lower rolling resistance & higher fuel savings, and reduced tire wear & maintenance.
- Fast deployment even to remote locations.
- Use waste rock or low-quality aggregate fill.
- All-weather road materials allow working year round in any temperature or soil condition.

LEARN MORE

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Heavy Loading

Port & Intermodal Yards

- Design stable pavements to support heavy container traffic.
- Solve surface stability problems inherent with unpaved yards (deep ruts, potholes) with durable, aggregate & permeable pavements.
- Place under asphalt & concrete pavements to resist base settlement with 50% less base materials.

LEARN MORE

Base & Surface Stabilization

PRESTO GEOSYSTEMS®

Heavy Loading

Rail Ballast

- Stabilize and stiffen the track ballast layer more efficiently than 2D geogrids, especially in soft soil areas.
- Eliminate differential settlement problems at x-ings, wyes, and frogs.

LEARN MORE

Accredited Performance

- Extreme field testing and research at TTCI and Oregon State University and SmartRock testing at U Kansas.

See the Accredited Research >>

Base Stabilization

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Medium-Heavy Loading

Permeable Pavements

- Design highly-porous pavements to manage stormwater onsite and reduce runoff.
- Meet stormwater regs and low impact development (LID) and green infrastructure (GI) goals.
- Design with open-graded aggregate for maximum infiltration—the pavement layer and base act as a stormwater detention ‘basin’.

LEARN MORE

Surface Stabilization

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Medium-Heavy Loading

Road Shoulders

- Design stable road shoulders to eliminate problematic low and soft shoulders, erosion areas and rutting.
- Lower typical maintenance up to 3X.
- Protect sealed pavement from deterioration and edge breaks.
- Use aggregate or topsoil for vegetated shoulders.

LEARN MORE

Surface Stabilization

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Light-Medium Loading

Multi-Use Trails

- Build permeable, stable trail surfaces with 3D confined fill.
- Design for pedestrian, equestrian, ATVs, bicycles and vehicle loading.
- Build across soft soils and environmentally-sensitive areas with minimal disturbance.

LEARN MORE

Surface Stabilization

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Light-Medium Loading

Tree Root Protection

- Protect a tree's Critical Root Zone from compaction and root damage from construction equipment or access vehicles.
- Design to protect trees in soft soil areas or where no-dig restrictions apply.

LEARN MORE

Surface Stabilization

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Your Project is Important. See How We Can Help.

THE PRESTO ADVANTAGE

See how our advanced, adaptable geocells, porous pavers and mats put your project on track for success, and keeps your projects on time and on budget.

WATCH THE VIDEO

Customized Technical Presentations

Learn more about how the GEOWEB® 3D technology can work on your upcoming projects.

Learn & Earn PDH Credits.

SCHEDULE a Lunch & Learn Presentation >>

Local Support
Get an Estimate

Our global network of distributors and representatives will work with you to provide a price estimate.

Find Local Distributor/Rep >>

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Load Support System

Design with Certainty.

Get answers to your questions and help with your design. Our solution will be tailored for your unique project and site challenges. You can rely on our experience, tools & resources to help you create a quality design package.

Certainty and Peace of Mind—
from project start to finish.

Contact Us 1-800-548-3424 | www.prestogeo.com

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