

Geoblock[®]

Porous Pavement System

The Presto **Geoblock[®]** *Porous Pavement System* is a result of innovation designed to provide the right solution for a wide range of turf and load support applications.

The **Geoblock** system is a series of interlocking, high-strength blocks made from recycled plastic materials. The system is designed to handle the most demanding turf protection and load support requirements while allowing for vigorous growth of turf grass. And the larger size, .50 m x 1.00 m x 50 mm (20 x 40 x 2 inch nominal), is easier to handle and install.

The **Geoblock** system is an ideal paving solution in traffic areas where the natural beauty of grass and permeability of topsoil are desired.



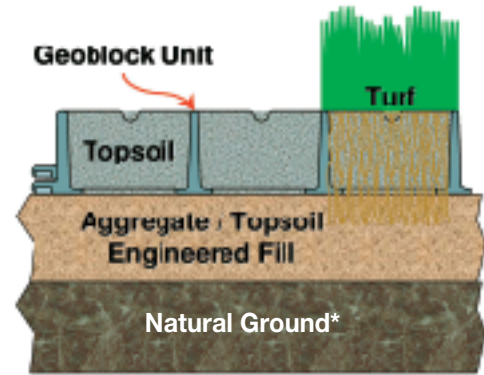
**Leaders in Advanced
Geotechnology™**



The Geoblock® System Components

The Geoblock® Porous Pavement System provides vehicular and pedestrian load support over grass areas while protecting the grass from the harmful effects of traffic. The system is comprised of four major components: (1) The Geoblock unit (2) the base support soil (3) the selected topsoil infill and (4) the selected vegetation.

Both the Geoblock unit and the support soil work together to support the imposed loading, while the Geoblock unit and the topsoil contribute to the vegetative support.



* Refer to Geoblock Use Guideline.

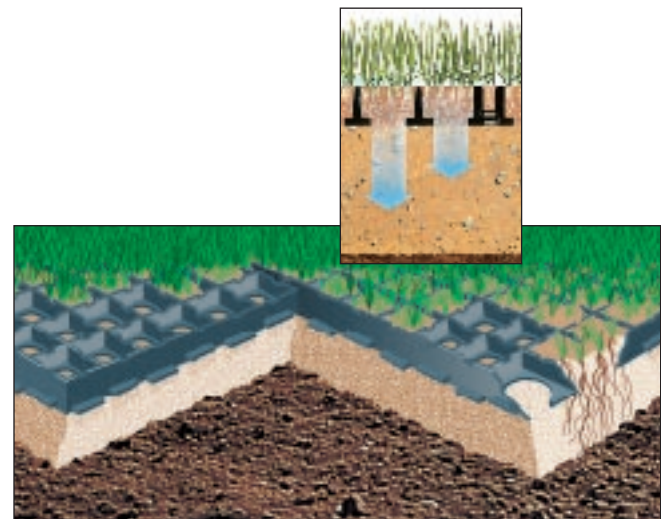
Geoblock Material Specification

Item	GBM-5150
	Material
	50% minimum Recycled, Polyethylene Plastic
Color	Charcoal Black
Chemical Resistance	Superior
Carbon Black for Ultraviolet Light Stabilization	1.5% - 2.0%
Unit Minimum Crush Strength @ 21°C (70°F)	2,900 kPa (420 psi)
Material Flexural Modulus at 23°C (73°F)	240,000 kPa (35,000 psi)
Dimensions (width x length)	0.50 m x 1.00 m (1.64 ft x 3.28 ft)
Unit Depth	50 mm (1.97 in)
Coverage Area	0.50 m ² (5.38 ft ²)
Cells per Unit	72
Cell Size	79 mm x 81 mm (3.1 in x 3.2 in)
Top Open Area per Unit	87%
Bottom Open Area per Unit	40%
Interlocking Offset Shear Transfer Tabs	1 tab for each peripheral cell
Weight per Unit	4.54 kg (10.0 lb)
Runoff Coefficient @ 63.5 mm/hr (2.5 in) Rainfall	1.5%
Units per Pallet	44

NOTE: All dimensions are subject to manufacturing tolerances.

The Geoblock System Advantage

- Fully Engineered System - designed to provide long term success; successful installations since early 1980s.
- Permeable Design - 87% open surface; allows rain to percolate into the ground rather than contribute to storm water runoff.
- Interlocking Unit Design - maximizes load distribution capability.
- Protects the crown of the grass; reduces rutting, prevents soil compaction when properly installed.
- Reduces the amount of site preparation and subgrade improvement.
- Easily Installed - ordinary tools used to cut units; no special fasteners or connection devices.

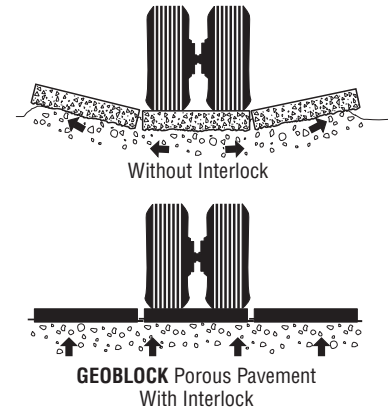


A System with Integrity

The Geoblock system supports heavy or concentrated loads by creating a flexible structural bridge within the topsoil layer that maximizes load transfer from block to block. The system flexes under loads that would break concrete.

Featuring a four-sided tabular, interlocking block design, the system provides superior load-bearing performance and layout design and construction flexibility. The recommended staggered placement (bricklayer's pattern) of the individual Geoblock units further increases the system's load distribution capabilities and maximizes the number of adjacent units used to effectively spread concentrated wheel loads over the largest possible area.

Effect of Interlock
Soil Stress Distribution



Geoblock® System Usage Guideline

Description	Load Description				Depth of Engineered Base	
	Maximum Tire Pressure	Single Axle Loading	Tandem Axle Loading	Gross Vehicle Loading	CBR 2 - 4	CBR > 4
Heavy Fire Truck Access & H-20 loading. Infrequent passes	Typical 620 kPa (90 psi)	145 kN (32 kip)	220 kN (48 kip)	36.3 tonne (80,000 lb)	150 mm (6 in)	100 mm (4 in)
Light Fire Truck Access & H-15 loading. Infrequent passes	Typical 586 kPa (85 psi)	110 kN (24 kip)		27.2 tonne (60,000 lb)	100 mm (4 in)	50 mm (2 in)
Utility & Delivery Truck Access & H-10 loading. Infrequent passes	Typical 414 kPa (60 psi)	75 kN (16 kip)		18.1 tonne (40,000 lb)	50 mm (2 in)	50 mm (2 in)
Car & Pick-up Truck Access. Infrequent passes	Typical 310 kPa (45 psi)	18 kN (4 kip)		3.6 tonne (8,000 lb)	None	None

NOTE: CBR refers to California Bearing Ratio. As the CBR increases, the depth of the engineered base will decrease.

RECOMMENDED TOPSOIL:

Suitable topsoil should be pulverized prior to filling the Geoblock cells and contain sufficient organic content to support vegetative growth. Topsoil such as sandy loam is recommended. Clay and clay loam materials are considered unacceptable.

RECOMMENDED ENGINEERED BASE:

Support soil shall consist of a mixture of coarse sand, clear-stone or crushed rock blended with topsoil (per Recommended Topsoil). This mixture will promote vegetative growth and provide required structural support. The aggregate portion should be free from fines and have a known percentage void-space when compacted. Pulverized topsoil, equal to the void percentage in the aggregate, should be added and blended prior to placement. If the topsoil is not present within the engineered base, grass growth may be significantly impaired.

Engineered Solutions

The Geoblock system provides an effective solution for a wide variety of turf and load support applications. From fire access lanes to hiking trails, parking areas to golf cart paths, the Geoblock system improves both the usefulness and aesthetics of an outdoor environment. Successful installations of the Geoblock porous pavement system are found worldwide.

- Emergency and utility access lanes
- Auxiliary parking areas
- Pedestrian walkways, trails and wheelchair access ways
- Approaches to monuments, statues and fountains
- Golf cart path shoulders and aprons
- Driveways, driveway shoulders and medians



Easy Installation

The Geoblock system is designed for easy installation, requiring less site preparation, less subgrade improvement, less excavation and less granular backfill than other porous pavement systems.

The Geoblock system is easily installed around obstructions and contours, and can be cut with ordinary hand or power tools. No forklifts, cranes or concrete saws are required.

The tabular, interlocking design saves installation time and money by eliminating the need for special tools, staples, cleats and rings. Plus, the system's larger, easy-to-handle size minimizes the quantity of blocks required on a given job, reducing installation costs and labor.



Assistance

Presto Geosystems and its authorized distributors offer assistance in determining the ideal system for your specific application. In addition, the following information is available for use by design professionals and contractors:

- **Design Guideline** - Load and base recommendations.
- **Material Specification** - An inclusive list of material properties and specifications.
- **CSI Format Specification** - A comprehensive product specification in CSI format.
- **Installation Guideline** - An illustrated, step-by-step set of installation guidelines.
- **Case Histories** - Case studies and project-specific papers with design, construction and performance information.
- **Technical Overview** - Product data, basic engineering concepts and theory for general application.
- **Test Documentation** - laboratory and reference site installation test results.

For more information, call the Presto Assistance Line at (800) 548-3424 or (920) 738-1118.



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