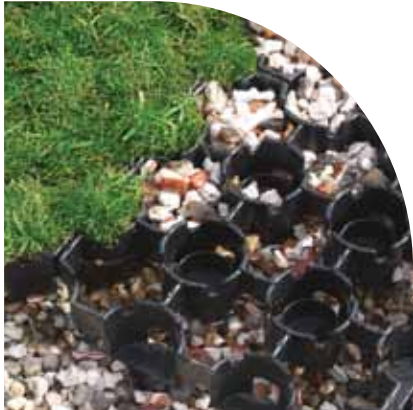


Grass and Ground Reinforcement Solutions





GRASSPROTECTA

Company Profile

TYPAR Geosynthetics is a division of Polymer Group, Inc. (PGI) a leading global supplier of ground support and stabilization. The geosynthetics division utilizes a broad range of international brands in its global footprint. With a strong background and proven excellence within the civil, construction, military, horticulture and landscaping industries, PGI offers enhanced commercial opportunities, as well as adding value to existing customers through a broadening product portfolio.

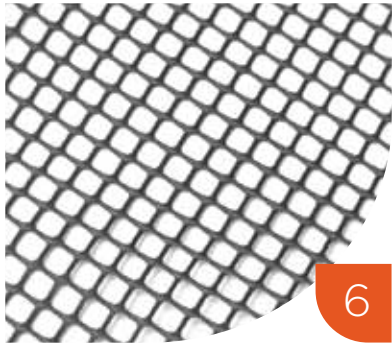
TYPAR provides product solutions for both Grass and Gravel surfaces.

PGI is committed to developing products and processes that provide a safer, cleaner, and healthier world. For many years, TYPAR has focused on identifying and improving performance in key areas of environmental impact, which includes waste production, energy consumption, water resource management, and the use of recycled and degradable materials. All TYPAR materials contain recycled content up to 100% and are chemically inert.

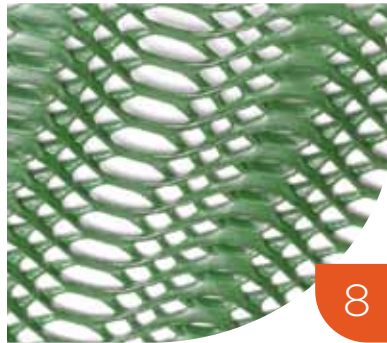
All product sizes and weights are nominal figures and may vary marginally to those published. All information is offered in good faith and PGI cannot be liable for any information given. Expert advice from an appropriate competent professional should be sought before determining any product is fit for purpose.

CONTENTS

TURFPROTECTA



GRASSPROTECTA



BODPAVE 85



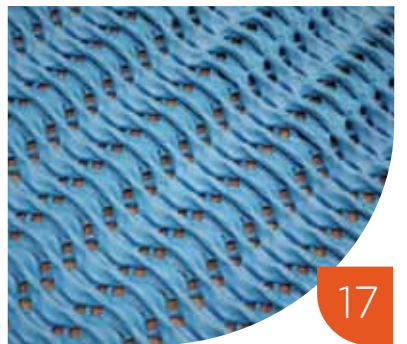
GEOCELL GS



BODMAT



PATHMAT



BIOBARRIER



GEOTEXTILE

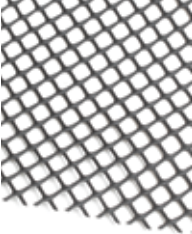













PRODUCT SELECTOR

for vehicular applications

Choosing the correct product

TYPAR manufactures a large range of products to reinforce, stabilize and protect grass and gravel surfaces. The chart below gives an overview of which product may be best suited for your project as determined by the existing ground conditions, the application and the frequency of use.

PRODUCT	APPLICATION	MAXIMUM LOAD CAPACITY	LOAD INDICATOR	PAGE
 <p>TURFPROTECTA Mesh .12" thick Hexagonal mesh</p>	Permanent, grassed paths, pedestrian areas, access routes and occasional use car parking on firm, well-drained ground. Mesh is installed directly onto existing grass or an area to be seeded.	Pedestrian and occasional light vehicle usage		6
 <p>GRASSPROTECTA Mesh .43" thick (Standard grade)* Oscillated mesh filaments to aid traction</p>	Permanent, grassed overflow car lots, wheelchair access routes, golf cart paths and heavily pedestrianized grass paths on firm, well-drained ground. Mesh is installed directly onto existing grass or an area to be seeded.	Light vehicle and heavy pedestrian usage		8
 <p>GRASSPROTECTA Mesh .55" thick (Heavy grade)* Oscillated mesh filaments to aid traction</p>	Permanent, grassed overflow grassed car lots, access lanes, light aircraft taxiways, RV and trailer park areas and equestrian surfaces. Mesh is laid directly onto the existing grass surface or areas to be seeded on well drained, firm ground.	Standard vehicle loads up to H15 and heavy pedestrian usage.		8
 <p>BODPAVE 85 Pavers (Grassed) 2" thick Interlocking cellular paving system</p>	BODPAVE 85 cells can be filled with soil and seed to create a natural grass surface, ideal for permanent grassed car lots, helipads, emergency access lanes and other trafficked areas. BODPAVE 85 should be laid onto a free draining base and may be supported for improved stability.	Heavy vehicle loads up to H25 loading		10
 <p>BODPAVE 85 Pavers (Gravel) 2" thick Interlocking cellular paving system</p>	BODPAVE 85 cells can be filled with gravel for permanent car lots, emergency service access lanes, gravel driveways and other trafficked areas. BODPAVE 85 should be laid onto a well drained prepared base and may be supported for improved stability.	Heavy vehicle loads up to H25 loading		10
 <p>TYPAR GEOCELL GS Cells 4"-8" thick Cellular confinement system</p>	TYPAR GEOCELL GS cells can be filled with soil or aggregate material to provide slope protection and load support. Suitable for slopes up to 45 degrees (1:1 slope) and on horizontal surfaces to provide a stable base for traffic and an even load distribution.	Heavy vehicle loads up to H25 loading, off-road industrial machinery		14

* The suitability of a standard or heavy grade will be site specific. Please contact TYPAR to discuss with one of our technical managers. All TYPAR grass and ground reinforcement products are suitable for use as a source control solutions in LID and NPDES applications.



Turfprotecta

Turf Reinforcement Mesh

TURFPROTECTA mesh is a lightweight polyethylene mesh used to reinforce grassed surfaces. It is suitable for grassed paths, pedestrian areas and occasional-use car lots. The mesh is installed directly onto existing grass or an area to be seeded.

TURFPROTECTA mesh is a black or green, lightweight polyethylene mesh for grass reinforcement where occasional light vehicular or pedestrian use is required for car parking or access routes. Supplied in 6.56' x 98' rolls, the mesh is ideal for reinforcing grassed surfaces prone to wear and smearing which can create a muddy surface incapable of being used.

Suitable applications

- Paths
- Pedestrian areas
- Lawn Maintenance
- Cart Paths
- Occasional use car lots

Manufactured from 100% recycled high density polyethylene, the mesh is UV stabilized and simple to install; after cutting the grass short, the mesh is unrolled and pinned to the surface using metal U-Pins.

By allowing plants to grow through the mesh apertures, the blade intertwines with the mesh filaments creating a strong, discreetly reinforced surface, limiting damage and reducing soil compaction. It is advisable to allow the grass to fully establish before the area is used to create a stronger reinforced surface (this may take only a few weeks to a few months depending on the grass growing season.) The grass can however be mowed, rolled and fertilized as usual during this period. TURFPROTECTA mesh can be installed onto existing grassed surfaces or newly landscaped areas, for both permanent or temporary applications. It is strongly recommended that installation be carried out during the growing season to allow a strong interlock between the mesh and the grass roots.



Fixing Pins

Product	U-Pins
Material	steel
Size (inches)	6.7 x 2.75 x 0.23 dia
Other	50 pack

Size	Grade	Color	Mesh Aperture	Weight (lbs/ft ²)	Material
6.56' x 98.42'	Heavy	Black	0.86" x 1.06"	0.135	HDPE (100% Recycled)
6.56' x 98.42'	Heavy	Green	0.86" x 1.06"	0.135	HDPE (100% Recycled)

TYPAR product specifications can be downloaded freely from www.typargeosynthetics.com

Grassprotecta

Grass Reinforcement Mesh

GRASSPROTECTA reinforcement mesh is a heavy duty polyethylene mesh used to reinforce grassed surfaces. It is a permanent solution for overflow parking lots, pedestrian paths, light aircraft taxiways, equestrian surfaces and RV parks. The mesh is installed directly onto existing grass or an area to be seeded.

GRASSPROTECTA mesh reinforces grassed surfaces prone to wear, rutting and smearing. The oscillated mesh structure has been designed to increase traction and improve slip resistance by up to 97% compared to standard straight oriented meshes.

- High level of reinforcement - up to 8 tons per axle (imposed load)
- Ideal for permanent or temporary applications
- Fast and cost effective installation compared to plastic paving grids
- No excavation or soil removal necessarily required
- Low slip risk PTV value of >40

GRASSPROTECTA is made from recycled content for sustainable, cost effective grass reinforcement

GRASSPROTECTA mesh is supplied on 6.56'x 65.6' and 3.28'x32.8' rolls in two thicknesses (0.45" and 0.55") as determined by the application and manufactured from partly recycled UV stabilized polyethylene (minimum 20% recycled polymer).

Installation is simple; after cutting the grass short the mesh is unrolled and pinned to the surface using metal U-Pins. When grass grows through the mesh apertures, GRASSPROTECTA mesh allows the grass to intertwine with the mesh filaments creating a strong, discreetly reinforced surface capable of withstanding vehicle loads, limiting damage and reducing soil compaction. GRASSPROTECTA mesh can also be installed onto newly landscaped areas and seeded as required.

TYPAR strongly advises that newly installed GRASSPROTECTA mesh areas should be left unused until the grass has grown through the mesh apertures ensuring a strong interlock with the grass and mesh filaments is achieved - normally after a few weeks during the growing season and the surface has undergone several mowing cycles. If the surface is used immediately grass growth may take a longer period of time to establish, thus limiting the effectiveness of the product.

GRASSPROTECTA mesh can be used in source control applications as part of a LID/LEED system and is the perfect alternative to impermeable paved surfaces where natural grassed traffic lanes and driveways are preferred, where planning restrictions are applied or cost savings are being considered.



Fixing Pins

Product	U-Pins
Material	steel
Size (inches)	6.7 x 2.75 x 0.23 dia
Other	50 pack

Grade	Nominal weight (lbs/ft ²)	Thickness	Tensile Strength (kN/m) (MD)	Roll size	Material
Standard	0.245	0.45"	0.245	3.25' x 32.8'	Recycled/Virgin HDPE Blend
Standard	0.245	0.45"	0.245	6.56' x 65.6'	Recycled/Virgin HDPE Blend
Standard	0.245	0.45"	0.245	6.56' x 32.8'	Recycled/Virgin HDPE Blend
Heavy	0.41	0.55"	0.41	3.25' x 32.8'	Recycled/Virgin HDPE Blend
Heavy	0.41	0.55"	0.41	6.56' x 65.6'	Recycled/Virgin HDPE Blend
Heavy	0.41	0.55"	0.41	6.56' x 32.8'	Recycled/Virgin HDPE Blend

TYPAR product specifications can be downloaded freely from www.typargeosynthetics.com

Grassprotecta™ Series

Scour Protection

GRASSPROTECTA™ is your solution to replace traditional hard armour erosion control structures with high performing, naturally vegetated surfaces to reduce sediment loss and improve downstream water quality.

GRASSPROTECTA™ is composed of High Density Polyethylene, with 20% recycled content, and designed with a 50% open space structure to accommodate a lush, uniform vegetated surface when established. With proper installation, the reinforced transition zone will visually appear as a grassed or natively vegetated surface, while reinforcing the soil against erosion equivalent to Class 1 Rip-Rap stone.

APPLICATIONS

- Vegetated Erosion Control
- Stormwater Pipe Outfall
- Conveyance Channel
- Slope Stabilization
- Streambank and Shoreline Reinforcement
- Dam and Levee Overtopping Stabilization
- Detention Pond Emergency Outflow Weir
- Vegetated Shoreline Access
- Maintenance Vehicle Access Stabilization
- Canoe & Small Craft Launch

In combination with surface armament, GRASSPROTECTA™ acts as a stabilization layer for maintenance vehicle access, stabilizing the surface to prevent rutting in low lying, saturated areas when mowed or accessed.

BENEFITS

- Multiple Product Applications and Use
- 20% Recycled Content
- 50% Open Space for Lush Vegetative Cover
- Flexible to Conform to Undulating Surfaces
- Slip Resistant Oscillated Mesh
- Roll-out for Fast Installation
- Exceeded TRI Env., Inc. testing capability
- Replace up to Class 1 Rip-Rap

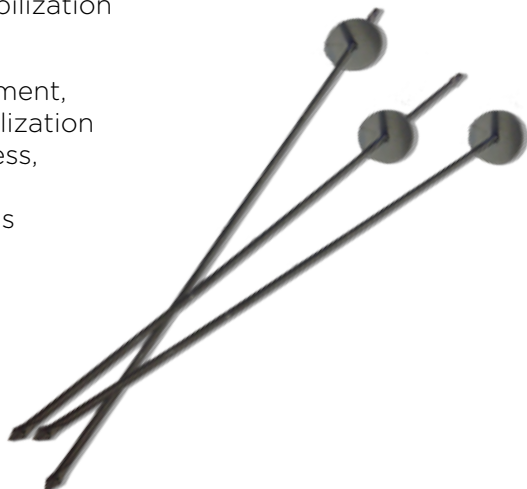
Lock-Disc Anchors

Specially designed soil anchors are used to fix GRASSPROTECTA™ to the surface and maintain stability under high shear values (>12.3 lbs/sf) even under non vegetated soil conditions. Refer to the GRASSPROTECTA™ installation guide for Scour Application instructions.

Scour Protection Performance

Shear Value with TRM >12.3 lbs/ft²

Velocity Value >23 ft/sec



Bodpave 85

Porous Paving Grids

Permanent grassed or gravel car and coach parking, fire access routes, helipads, taxiways, cycle paths, driveways, access roads and other trafficked areas where a structurally-sound, well drained base is present or will be installed.

BODPAVE 85 porous pavers are a modular, interlocking cellular and porous paving system for ground reinforcement. It can be installed with either a grass or gravel filled surface. Manufactured from UV stabilized 100% recycled HDPE, BODPAVE 85 pavers are strong, chemically inert and non-toxic, enabling it to provide a durable, safe and sustainable eco-friendly surface for trafficked areas.

APPLICATIONS

- Car/Bus Parking Lots (Grass or Gravel)
- H25 Emergency Vehicle Access Roads
- Aircraft Taxiways and Helipads
- Walkways and Handicap Paths
- Golf Cart Paths
- Driveways and Residential Parking

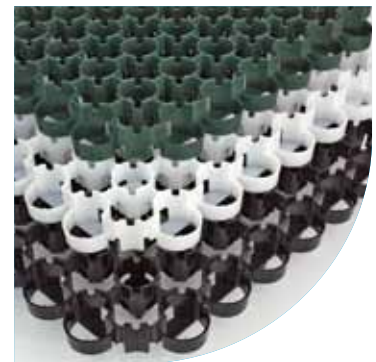
BODPAVE 85 pavers are a cost effective solution to worn and rutted grassed areas, displaced gravel and for source control of surface water run-off.

BODPAVE 85 pavers have been manufactured to offer a high load bearing performance, providing structural integrity and a positive mechanical interlock.

BENEFITS

- Load bearing up to 230 psi @ .25" deflection.
- Manufactured from 100% recycled polymer.
- Environmentally friendly, aesthetically pleasing and free draining natural grass or gravel surface.
- Add bullet: Contributes to 15 points under LEED projects

The unique design of BODPAVE®85 pavers resist lateral movement, improves traction and allows expansion and contraction while promoting optimum grass growth, root protection and surface stabilization.



Bodpave 85

Porous Paving Grids

BODPAVE®85 pavers should be installed onto a well prepared, free draining, firm and relatively level sub-base (typically a Class 5 or reduced fines Class 7) using either a reduced-dig system or by employing a full sub-base construction.

The panels (a pre-assembly of four pavers) connect together and are then filled with either a sand:soil rootzone and seeded or turfed for a grass surface, or filled with an angular aggregate for a gravel surface as determined by the application. Construction profiles for each application will be determined by the specific site conditions and load bearing criteria. Detailed design literature and technical support are available to download online from www.typargeosynthetics.com

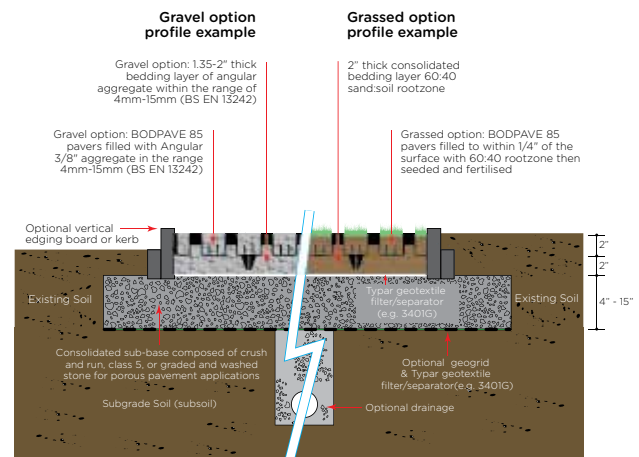
All BODPAVE 85 paver applications must be provided with sufficient and adequate drainage facilities in order to function as intended. Failure to ensure this may compromise overall performance.

The open cell structure provides high surface water infiltration and is suitable for source control within a LID/LEED profile.

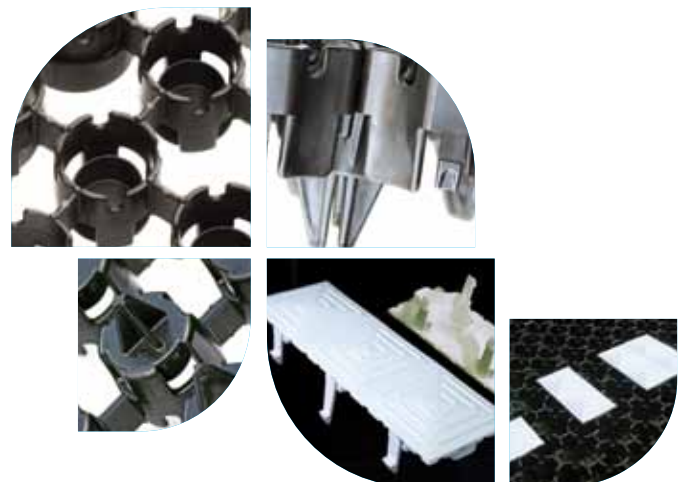
Plastic markers are available for marking parking bays and lines within areas of the BODPAVE 85 cellular paving system. The markers are designed to clip positively into the plaque shaped cells of the BODPAVE 85 pavers and can be fitted in various orientations to create solid or dotted lines and 'T' or 'L' shapes for parking bay heads, aisles and junctions.

They can be permanently fixed in place by applying a suitable high strength plastic (HDPE) glue or an outdoor frame sealant to the underside of the marker. If required, the markers can be reduced in size to create single-cell or double-cell sized units by cutting accurately along the lines between each textured square/pyramidal section. It is recommended that these are bonded into place to resist displacement.

TYPICAL PROFILE

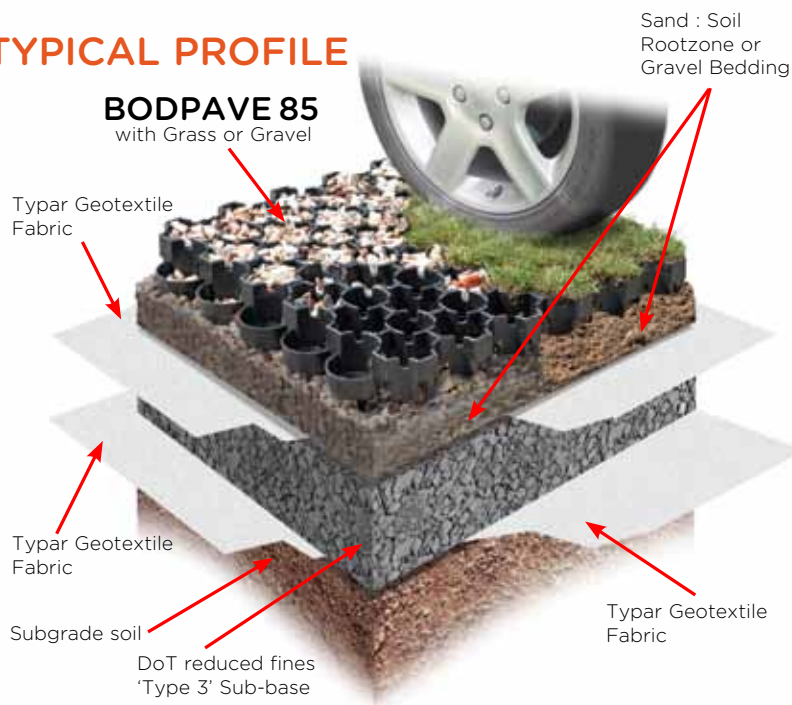


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TYPICAL PROFILE



Not all layers will apply to every application and drainage may be required. Please refer to design guidance documents.



Marker Color	Dimensions	Polymer
White	0.75' x 23'	HDPE

Paver Dimen- sions	Nominal cell size	Quantity per unit	Nominal weight (lbs/ft ²)	Load bearing capacity @ 2" deflection (psi)	Material	Color
19.7" x 19.7" x 2" + 1.37" integral ground spike	2.64" plaque and 1.81" round	4 grids	1.27	230 (standard profile design)	Recycled HDPE	Black Green

TYPAR product specifications can be downloaded
freely from www.typargeosynthetics.com

TYPAR GEOCELL GS

Cellular Confinement System

TYPAR GEOCELL GS is a cellular confinement system for slope protection and load support applications.

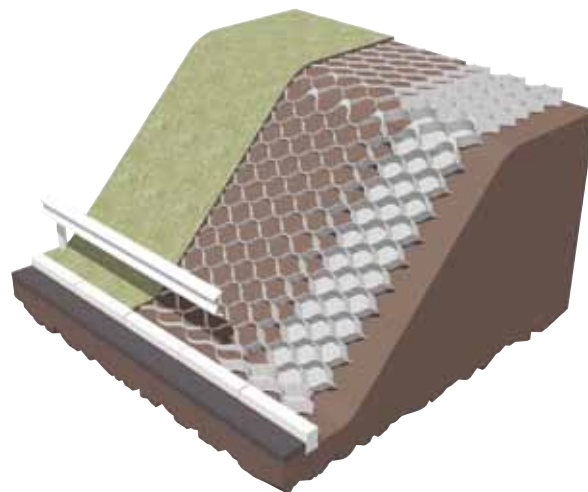
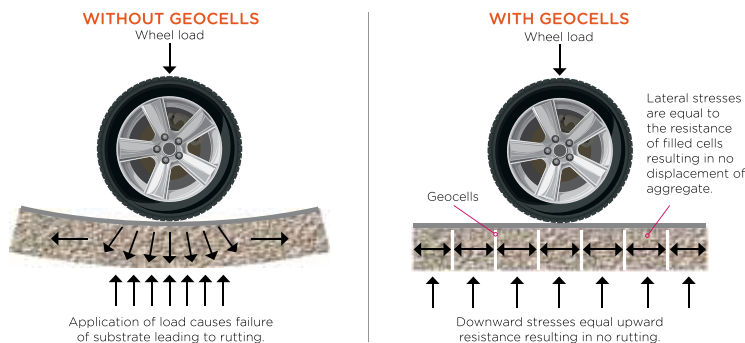
The TYPAR GEOCELL GS cellular confinement system utilizes the strength and permeability of a geotextile to create a 3-dimensional cellular confinement system. Manufactured from dark grey PP/PE bicomponent fiber geotextile, the cell walls are permeable to water, air and nutrients, increasing stability and vegetative performance. The TYPAR GEOCELL GS system ships in compacted panel form and expands into a honeycomb formation to the desired shape and dimension on-site. The unique, lightweight, flexible material conforms to surface variations to improve ease of installation while resisting impact damage. A variety of infill materials, including native soils and recycled aggregates, may be used to reduce waste material and overall construction costs.

TYPAR GEOCELL GS for Slope Protection

The cellular structure of the TYPAR GEOCELL GS system improves resistance to erosive forces on steep, unstable, or slopes exposed to severe hydraulic or mechanical stresses. Variable cell depths and diameters provide cost-effective options for protection up to 1:1 (45 deg) slopes.

TYPAR GEOCELL GS for Load Support

TYPAR GEOCELL GS cells transfer downward forces laterally, reducing loads on underlying soils. The cellular confinement system is an ideal solution for providing stabilization over poor soil conditions, reducing constructed profile depth and cost, protecting soil and roots from compaction, and providing site access for light, heavy, and industrial vehicles.



A TYPAR Geocell GS with its distinctive array of interconnected cells.



Fixing Pins

Product	Fixing Pin
Material	Steel Rod
Size (inches)	22" x 4" x 0.32" dia

Product	Panel Size	Cell Diameter	Cell Depth	Weight	Material	Application Method
TYPAR GEOCELL GS 250/100	16.4' x 23'	10"	4"	37.5 lbs	Non-woven PP/PE	Pedestrian/Light Vehicle Load Support and Slope Protection
TYPAR GEOCELL GS 250/150	16.4' x 23'	10"	6"	55 lbs	Non-woven PP/PE	Light Vehicle Load Support and Slope Protection
TYPAR GEOCELL GS 350/100	16.4' x 23'	13"	4"	24 lbs	Non-woven PP/PE	Slope Protection
TYPAR GEOCELL GS 350/150	16.4' x 23'	13"	6"	37.5 lbs	Non-woven PP/PE	Slope Protection
TYPAR GEOCELL GS 220/200	20' x 10'	8"	8"	44 lbs	Non-woven PP/PE	Heavy Vehicles Load Support

TYPAR product specifications can be downloaded freely from www.typargeosynthetics.com

BODMAT

Flexible Surface Reinforcement

Flexible surfacing for temporary or permanent event walkways, grass playground perimeter areas and livestock applications.

BODMAT flexible surface reinforcement matting has been developed using the proven oscillated design of GRASSPROTECTA mesh and has been tested to a 5.9' CFH (Critical Fall Height.).

BODMAT matting can be installed in external applications by pinning using steel U-pins. It can also be installed in internal applications including horseboxes where a soft and flexible matting is required. Developed specifically for both animal and pedestrian traffic, BODMAT matting offers a pleasant, water pervious, enhanced-grip, under foot walking solution that is ideal for:

- Walkways and paths
- Grass play area reinforcement
- Recreation areas (parks, picnic areas)
- Event flooring
- Horseboxes and animal boarding areas

BODMAT flexible surface reinforcement is available in convenient roll form, and offers many user benefits:

- Flexible to allow use on contoured surfaces
- Can be used by wheelchairs and strollers
- Ideal for both people and animals
- Allows grass to grow through the mesh apertures
- Reinforces grass

BODMAT flexible matting is a designed and tested practical solution:

- Allows water / rain infiltration
- Flexible and durable
- Easily cut to shape/size
- Tested to a Critical Fall Height (CFH) of 5.9ft - BS EN 1177



Roll Size	Mesh Thickness	Color	Weight (lbs/ft ²)	Tensile Strength	Material
6.5' x 32.8'	0.5"	Black	0.73	12 kN/m	Elastomeric Blend

PATHMAT

Beach Access Mat



Flexible surfacing for temporary or permanent access over soft sand surfaces and beach access.

PATHMAT beach access mat has been specifically developed for use in permanent or temporary recreation access applications. Utilizing the proven oscillated mesh design ensures that rigidity and strength are preserved over soft sand surfaces while the elastomeric material is able to contour to undulating surfaces. This environmentally friendly, slip resistant product is easily installed and able to be removed and reinstalled per environmental regulations. Developed specifically for both animal and people traffic, the product provides a barefoot friendly surface for beach goers. Wherever a water pervious, enhanced-grip walkway access is required, PATHMAT beach access mat is the solution.

- Portable and easily removable rollout beach mat
- Pedestrian and wheelchair accessible
- Oscillated mesh provides strength over sand, pebble and turf surfaces
- Adapts smoothly to contoured surfaces
- Slip resistant surface providing a safe surface in wet conditions
- Minimal maintenance easy to use beach access mat
- Visually attractive design guides guests to desired locations

PATHMAT beach access mat is available in roll form allowing for a quick roll and pin installation. The UV stabilized elastomeric material is recyclable after use, reducing its environmental impact.

The material thickness, durability of construction and portability of the product make it the perfect solution for providing accessible beach pathways. PATHMAT beach access mat can be used in a multitude of applications - wherever recreation access is required for walking and wheelchair accessibility. The mat is also able to be cut and formed around existing beach structures in addition to protected native beach dunes.



Fixing Pins

Product	U-Pins
Material	Steel
Size (inches)	16" x 6" x .375 diameter
Other	10 per pack

Roll Size	Mesh Thickness	Color	Weight (lbs/ft ²)	Tensile Strength	Material
5' x 32'	0.53"	Blue	0.76	12 kN/m	Elastomeric PE Blend

TYPAR product specifications can be downloaded freely from www.typargeosynthetics.com

TYPAR BIOBARRIER

Root & Weed Control System

An innovative chemical and physical barrier system combining the Non systemic stopping power of Trifluralin with the strength and durability of TYPAR

The BIOBARRIER root and weed control system manages roots through the slow, controlled release of Trifluralin, a non systemic herbicide that has been used in food crop production for more than 40 years. Nodules containing Trifluralin are through-injection-molded to 4 osy, durable TYPAR GEOTEXTILE fabric, creating a continuous chemical and physical barrier against roots without impeding the flow of water, air or nutrients. Roots growing into the zone of inhibition are stopped, not just redirected, encouraging the plant to send energy to unimpeded areas of the root system, promoting healthy plant growth.

BIOBARRIER Root Control System

Used vertically, the BIOBARRIER root control system protects adjacent structures from root damage. Guaranteed protection for 15 years reduces the chance of injury and potential liability, as well as the costs associated with preventative maintenance and damage repair.

BIOBARRIER Weed Control System

Installed horizontally below 3" of stone/wood mulch, the BIOBARRIER weed control system blocks weed establishment using two layers of defense: chemical and physical. Guaranteed for 10 years, weeds are unable to develop a strong root system in the mulch layer while ornamental tree and shrub roots expand unimpeded below the Trifluralin emitting fabric layer, eliminating unwanted competition and maintenance costs.





BIOBARRIER Surround System

Tree roots seek out air and moisture in the soil, causing expensive damage to underground infrastructure, septic lines, municipal pipes, swimming pools, and more. BIOBARRIER'S unique geotextile design lends it the flexibility to surround infrastructure, extending the life of your investment by providing protection from root damage for a minimum of 15 years,

Weed Control width in.	29	39	58.5
Fence Rows	●	●	●
Guardrails	●	●	●
Landscaping	●	●	●
Pavers	●	●	●
Street Medians	●	●	●
Tombstones	●	●	
Tree Skirts			●
Utility Substations			●

Guaranteed for up to 15 years!

Root Control Width in	12	19.5	24	29	39	58.5
Building Foundations					●	●
Burial Vaults/ Tombstones						●
Containers			●	●	●	●
Curbs		●	●			
Drain Lines	●	●	●	●	●	●
Earthdams						●
Golf Greens/Tees/ Cart paths		●	●	●	●	
Landfills						●
Medians			●	●	●	
Paths	●	●	●	●		
Planting Beds		●	●	●	●	●
Pots	●	●				
Retaining Walls				●	●	●
Roads		●	●	●		
Roof Gardens					●	●
Septic Tanks/Fields						●
Sidewalks		●	●	●		
Swimming Pools		●	●	●	●	
Tennis Courts		●	●	●	●	
Underground Pipes/ Cables	●	●	●	●	●	●
Underground Storage Tanks						●
Utility Substations		●	●	●	●	

BIOBARRIER Root Control is available in 20 foot or 100 foot roll lengths

TYPAR GEOTEXTILE

Separator/Filter

TYPAR non-woven, thermally bonded GEOTEXTILES utilize continuous filament technology for superior strength and uniformity, providing the ideal solution for construction and civil engineering applications.

Made in the USA, TYPAR GEOTEXTILES boast over 40 years of proven performance in separation, stabilization, and filtration applications. The continuous filament, thermally bonded design provides a higher strength:weight ratio than standard non-woven construction fabrics and maintains consistent permeability rates regardless of soil type or compaction. TYPAR GEOTEXTILE'S unique characteristics make it the ideal solution for road reinforcement, industrial yard stabilization, subsurface drain applications, erosion control, landfill separation, mulch underlayment, and septic system projects.

- Ideal for separation, stabilization, and filtration
- Higher strength:weight ratio
- Durable - 40+ years of proven performance
- Up to 20 percent recycled content
- Superior uniformity
- Consistent permeability even under compaction
- Filtering that prevents clogging
- Made in the USA
- Isotropic fabric provides stability and strength in all directions

Tough over time, TYPAR GEOTEXTILES preserve the original design, reduce construction and maintenance costs, and increase a project's longevity!





AASHTO Class M288			-	-	-	-	3	2	2	1	1
			TYPAR 3151	TYPAR 3201	TYPAR 3301	TYPAR 3341	TYPAR 3401	TYPAR 3501	TYPAR 3601	TYPAR 3801	TYPAR 3100
Mechanical (Marv) ¹											
Grab tensile strength	ASTM D4632	lbs	35	60	120	117	140	186	248	329	386
Grab elongation	ASTM D4632	%	60	60	60	60	60	60	60	60	60
Trapezoidal tear strength	ASTM D4533	lbs	15	25	35	41	64	61	85	86	95
Puncture strength	ASTM D4833	lbs	10	18	25	41	45	56	75	90	105
CBR Puncture	ASTM D6241	lbs	-	-	-	155	227	305	400	584	654
Endurance (MARV) ¹											
UV Resistance @ 500 hrs	ASTM D4355	%	-	-	-	70	70	70	70	70	70
Hydraulic (MARV) ¹											
Apparent opening size ²	ASTM D4751	US Sieve	20/30	30	50	60	70	70	140	170	>200
Permittivity	ASTM D4491	sec ⁻¹	1.5	1.0	0.8	1.3	1.4	0.53	0.22	0.1	0.1
Water flow rate	ASTM D4491	gal/min/ft ²	235	190	95	84	91	34	12	6	-
Physical (Typical)											
Unit weight		oz/yd ²	1.6	1.9	3.0	3.4	4.0	5.0	6.0	8.0	10
Roll diameter		in	7	7	8	8	9	10	10	12	-
Length		yd	100	100	100	100	100	100	100	100	-
Width		in	151	151	151	151	151	151	151	151	-
Roll area		yd ²	419	419	419	419	419	419	419	419	-
Roll weight gross		lbs	50	58	87	97	113	138	165	218	-
Width		in	-	-	-	-	187	187	187	187	187
Roll area		yd ²	-	-	-	-	519	519	519	519	100
Roll weight gross		lbs	-	-	-	-	142	175	209	275	-

Notes:

(1) Minimum average roll values (MARV) in the weaker principal direction

(2) O₉₅ Max. ARV

Intelligent Application of Materials Technology

Geotextiles

TYPAR Geotextiles
TYPAR C-Class Construction Geotextiles
SILENT GARDNER Landscape Fabric
BIOBARRIER Root Barrier

Ground Reinforcement

BODPAVE 85 Porous Pavers
GRASSPROTECTA Reinforcement Mesh
TURFPROTECTA Reinforcement Mesh
GRASSCARPET Protection Carpet
PATHMAT Beach Access Mat

Geocells

TYPAR Geocell Slope stabilization
TYPAR Geocell GS Cellular Confinement
DEFENCELL Wall Protection System

Geocomposites

GRASSCARPET Geonet/Filter
Frost Blanket
Geocomposite Drains

Industrial & Site Safety

PROTECTAFOAM Foam Edge Protection
PROTECTASLEEVE Protective Netting
Filtration Mesh/Media
Plastic Stilage Separator Mesh

Underground Marking & Protection

UTILITAPE Underground Warning Tape
UTILINET Underground Warning Mesh
DETECTAMESH Detectable Mesh
WAVELAY Detectable Tape
PROTECTAMESH HD Rockshield
Pipeline Protection
CONTAMINET Contaminated Ground Mesh
CONTAMINET Composite
Plastic Cable Protection Covers
Cable & Pipeline Protection Mesh
Indicator Mesh

Horticulture & Plant Protection

TUBEX Treeshelters
Anti-Bird Netting
Derr Fencing
RIGHT GUARD Fertilizer
VISPORE Tree Mats
BIOBARRIER Root & Weed Protection

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