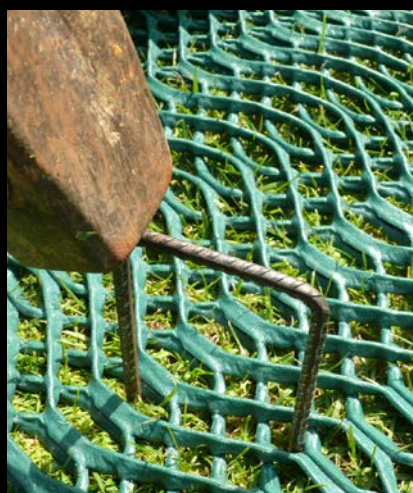




All Stake
Supply



GRASS, GROUND & GRAVEL REINFORCEMENT

www.grassreinforcement.com.au

ABOUT US

GRASS, GROUND & GRAVEL REINFORCEMENT

All Stake Supply is a family owned, Australian company established in 1976. For 40 years our business has been focused on delivering a complete distribution service supplying quality products and solutions that facilitate environmental sustainability.

All Stake Supply delivers a comprehensive range of grass, ground & gravel reinforcement products suitable for low to high demand traffic areas. The product range can be used as part of a source control layer within a WSUD design, where stormwater run-off is a consideration.

GROUND & GRAVEL REINFORCEMENT

Within our range are our permeable interlocking paving grids that are eco-friendly and manufactured from recycled plastic. These pavers provide a permeable stabilised pavement that is ideal for either a gravel or grass fill, for applications including; car parks, coach parks, fire access lanes, driveways, paths and disabled access areas. Their open cell structure is porous and ideal for optimum grass growth where a grass surface is preferred. It also retains gravel in place where a permeable angular stone surface is required.

GRASS REINFORCEMENT MESH

Grass reinforcement meshes are market leading, thick plastic meshes that are installed directly onto grassed areas that are utilised for; overflow car parking, paths, verges and lawns. Once installed, the grass quickly grows through the mesh and the grass roots intertwine with the mesh filaments creating a strong, reinforced invisible surface structure for car and pedestrian traffic. The reinforced surface will reduce grass wear and tear and rutting caused by excessive vehicle usage.

SUPPORT

Our experienced technical team is available to visit project sites to discuss product and application viability.

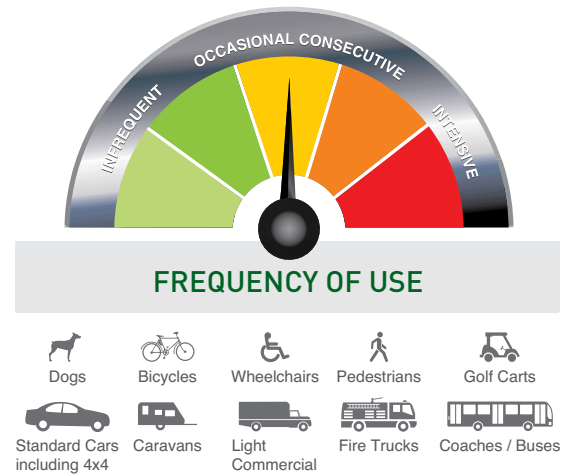
CONTACT













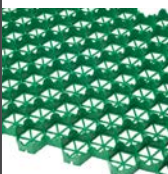



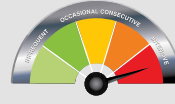

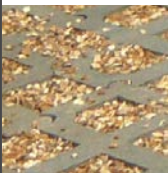


Any queries regarding All Stake Supply's reinforcement solutions, contact us on 02 9627 3699 or via email sales@allstakesupply.com.au



PRODUCT SELECTION CHART

The following table is designed to identify which ground reinforcement products may be best suited for your requirements where vehicles are required to drive over grass and gravel surfaces. Typical applications and frequency of use would need to be confirmed by the existing ground conditions. Please contact our technical sales team for further guidance on product suitability. All our products can be used for regular pedestrian applications.



Product	Typical Application	Frequency of Use	Loading	Page
 TR4 Turf Reinforcement Mesh – heavier grade plastic mesh for reinforcing grass.	Pedestrian pathways, lawn reinforcement, dog areas, playgrounds, grass paths, wheelchair access and free range chicken farms.			04
 GR11 Grass Reinforcement Mesh – 11mm thick plastic mesh for reinforcing grass.	Overflow grass car parks, grass verge parking, access roads, wheelchair access, and golf buggy routes.			06
 GR14 Grass Reinforcement Mesh – 14mm thick plastic mesh for reinforcing grass.	Overflow grass car parks, grass verge parking, access roads, wheelchair access, and golf buggy routes.			07
 EconoGrid 40™ Gravel – An economical porous reinforced paver used for creating reinforced gravelled areas.	Overflow car parking, fire access lanes, caravan/ holiday home parking, residential parking and driveways.			08
 EconoGrid 40™ Grass – An economical porous reinforced grass paver used for creating reinforced grassed areas.	Overflow car parking, fire access lanes, caravan/ holiday home parking, residential parking.			10
 TruckGrid – Recycled plastic grids ideal for forklift movements.	Industrial factory yards, outside storage areas, HGV loading area, forklift access and coach and bus parking.			12
 TruckGrid Max – Permeable paving grids for heavy weight vehicle movement.	Intensive use car parking truck stands, loading bays and heavy duty industrial vehicle movements.			14

TURF REINFORCEMENT MESH

TR4



Turf reinforcement meshes have been specially designed using carefully selected high density plastics, to allow light trafficking – car or pedestrian – to grassed areas where and when this would not normally be considered. Turf Reinforcement mesh helps to reduce grass wear, rutting and damage by spreading loads and creating a stronger root base and so retaining a natural, structure free grass cover.

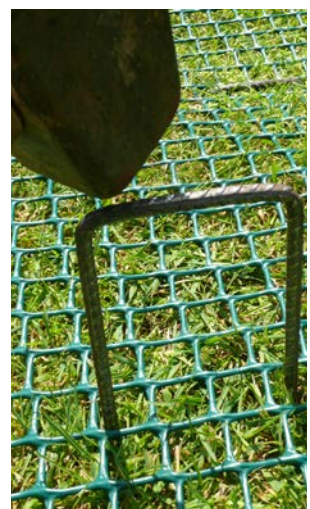
Applications:

- Infrequent light vehicle movement (TR4)
- Access to grass areas normally closed off to traffic (TR4)
- Pedestrian grassed areas / walkways. (TR4)
- Grass paths (TR4)
- Lawn reinforcement (TR4)
- Dog and pet run grassed areas (TR4)

Grass reinforced with turf reinforcement meshes can be used throughout the warmer seasons and occasionally in the winter months in some special circumstances, subject to factors like frequency of use, type of traffic, nature of soil and the surface drainage.

Turf reinforcement meshes are manufactured from part recycled HDPE plastics and are designed to provide many solutions to grass parking, backyards and worn and rutted grass areas.

TR grass reinforcement meshes have been specially designed to allow quick and maximum grass entanglement. The plastic mesh will quickly disappear into the grass producing an invisible reinforced natural looking grass surface. TR4 mesh is intended to give extra strength and a footprint to the top grass surface protecting the grass root structure and abrasion is greatly minimised.





For technical and installation information visit:
www.grassreinforcement.com.au/reinforced-turf-mesh

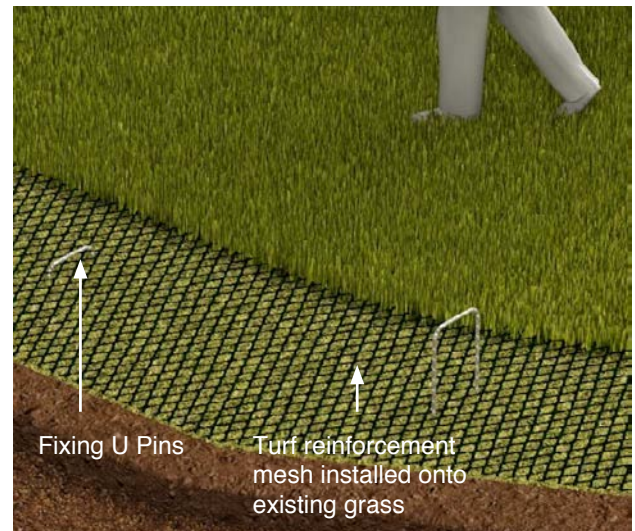


Installation is normally easy and trouble free by pinning the plastic mesh to the existing grass surface using steel fixing U-Pins. If installed correctly and not used inappropriately, the expected lifetime of the meshes should be 20 years.

TR4 plastic mesh is UV stabilised, and once in place the mesh should not degrade. For full details of how to install TR turf reinforcement mesh, please see our installation guide for further instruction. For further clarification please contact our technical team.

TR4 is a fully permeable solution and as such is used as/or in a Water Sensitive Urban Design (WSUD) system. The natural drainage of the land is unaffected as is the natural ecology of the soils by the mesh.

TR4 reinforcement mesh reinforces grass for cars and pedestrian applications while keeping a natural grass surface that is permeable.



Turf reinforcement mesh is available in two mesh grades and in various roll sizes:

- TR4 turf mesh is our premium grade 660g/m² product that is suitable for the more frequent light traffic applications.
- TR3 turf protection mesh is our lighter standard-grade 430g/m² product for less frequent and very light traffic applications or pet areas.

Product Range

Product	Size	Mesh Aperture	Weight	Material	Colour
TR4	2m x 30m	26 x 26mm	660g/m ²	HDPE (Part recycled)	Black
TR4	1m x 10m	26 x 26mm	660g/m ²	HDPE (Part recycled)	Black

Fixing U-Pins

TR turf reinforcement mesh is fixed to the grass using steel u-shaped pins.

Product	Pack Size	Material
170mm long x 75mm wide x 4mm dia	50 per pack	Steel



GRASS REINFORCEMENT MESH

GR11 & GR14



GR11 and GR14 grass reinforcement meshes have been specially designed, using carefully selected high density plastics, to allow permanent trafficking – car or pedestrian – to grassed areas where and when this would not normally be considered. GR grass reinforcement mesh achieves this by reinforcing and protecting existing grass areas against traffic damage (vehicle / pedestrian wear and rutting) whilst retaining and keeping the natural look of grass cover.

GR grass reinforcement meshes will allow prolonged summer and winter use subject to factors like frequency of use, type of traffic, nature of soil and drainage. This would include parking on a daily basis, access to areas closed off in the colder, wetter months and disabled access. Please contact our technical team for further guidance.

GR grass reinforcement meshes are used to provide many application solutions of parking and access where a grass surface may not have been previously considered.

Typical problems solved would include:

- Daily car parking requirements
- Overflow car parking requirements
- Allowing off road parking on grass verges
- Access to grass areas normally closed off to trafficking
- Minimising damage to highly trafficked grassed areas like builders compounds
- Temporary grass access routes
- Protection to allow routing by golf buggies
- Equestrian issues like poaching and rutting at paddock gateways, walkways and feeding rings





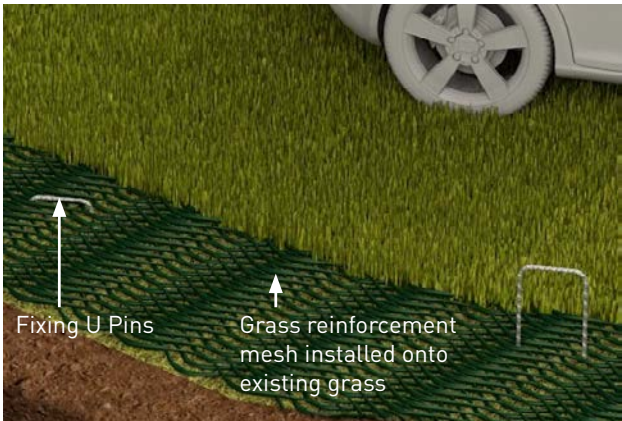
For technical and installation information visit:
www.grassreinforcement.com.au/grass-reinforcement-mesh



Installing GR14 & GR11 grass reinforcement meshes is normally easy and trouble free. The plastic mesh is laid onto the existing grass and fixed in place using steel U-Pins. If installed correctly and not used inappropriately, the expected lifetime of the grass reinforcement meshes should be 20 years. The plastic mesh is UV stable, rot proof and once in place the mesh will not degrade. Please see our installation guide for instructions or contact our technical team for further clarification.

GR meshes can be installed for immediate use for permanent applications. These would include grass access routes and builder compounds. Although not having the full working capacity of an integrated mesh, the effects of trafficking will be greatly minimised.

GR11 and GR14 are a fully permeable solutions and can be used as part of a source control system within a Water Sensitive Urban Design (WSUD) solution. The natural drainage of the land is unaffected as is the natural ecology of the soils by the mesh.



GR grass reinforcement meshes are available in two mesh thicknesses / grades and in various roll sizes:

- GR14 mesh is our heavy-grade 14mm thick, 2kg/m² product that is suitable for the more intensive / frequent traffic applications
- GR11 mesh is our standard-grade 11mm thick, 1.2kg/m² product for less frequent and lighter applications or where economic restraints prevail.

Product Range

Product	Size	Thickness	Weight	Material	Colour
GR14 Heavy	2m x 20m	14mm	2kg/m ²	HDPE (Part recycled)	Green
GR11 Standard	2m x 20m	11mm	1.2kg/m ²	HDPE (Part recycled)	Green
GR11 Standard	1m x 10m	11mm	1 2kg/m ²	HDPE (Part recycled)	Green

Fixing U-Pins

GR grass reinforcement mesh is fixed to the grass using steel u-shaped pins.

Product	Pack Size	Material
170mm long x 75mm wide x 4mm dia	50 per pack	Steel



ECONOGRID 40™

POROUS PAVER GRAVEL FINISH

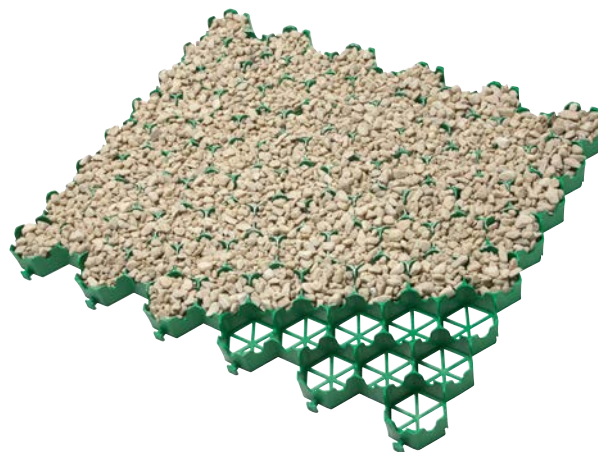


EconoGrid 40 is a porous paver that can provide a solution to a wide range of trafficking needs, especially in providing a stable, free draining pavement surface that retains gravel in situ. The application might be a gravel car park, an emergency access route or wheel chair / disabled access path. EconoGrid 40 plastic paving grids have been designed using carefully selected recycled plastics, to meet the demands and loadings imposed across a wide range of end requirements and site conditions.

Applications:

- Gravel car parking
- Overflow car parks
- Wheelchair / disabled access paths
- Free draining pedestrian paths
- Fire access roads / lanes
- Cycle paths
- Access routes and roads
- Drives and driveways

EconoGrid 40 porous plastic pavers can be filled with a 5mm to 20mm mixed sharp angular aggregate/ gravel to give a very stable, hardworking and free draining working surface. The design of EconoGrid 40 plastic porous pavers allows excellent interlock with the gravel resisting and negating dynamic and lateral loadings so the gravel and paver remains in situ with little or no maintenance requirements.





For technical and installation information visit:
www.grassreinforcement.com.au/econogrid-40

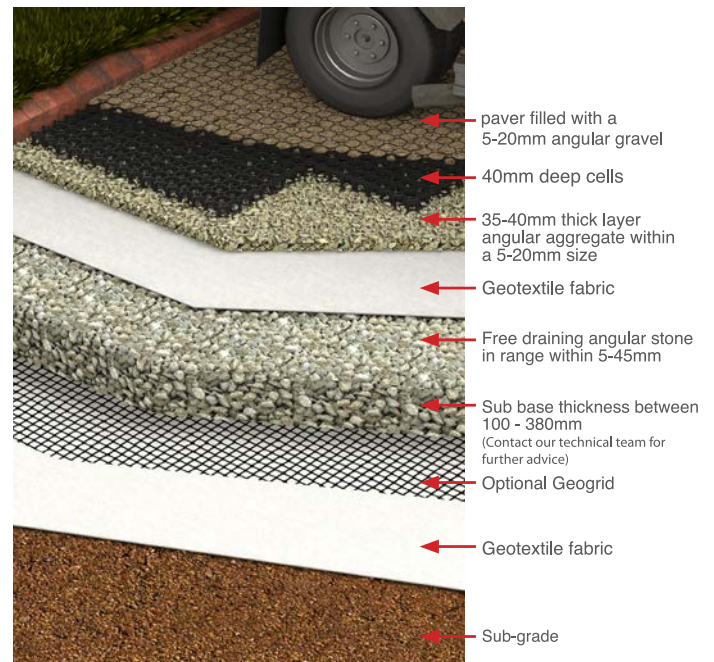


The retained gravel finish, when installed correctly, will provide a hard-wearing, robust and permeable free draining surface that would have an expected lifetime of many years. Please see our installation and design guidance documents for further information.

EconoGrid 40 porous pavers are supplied in easy to handle square grids which interlock with adjacent paving grids to create a stable and robust surface. The plastic pavers have a 40mm deep open honeycomb structure which promotes and allows excellent interlock between angular stone/gravel particles where a gravel pavement is required.

EconoGrid 40 paving grids have been manufactured using specially selected 100% recycled plastics that have the qualities that are required for a strong, long-lasting, stable product suitable for the designed traffic load. These include:

- UV stabilisation to stop degradation by sunlight.
- Tested to 150T/m², capable of withstanding cars, vans, trucks and lorries
- Paver profile allows expansion on warmer days or in direct sunlight when required to stop lifting
- Plastic selection to allow use in cold temperatures – some plastic will become fragile when cold
- Open structure to allow unhindered water permeability
- Paver design maximises support and stability from either a gravel or a grass root structure
- All plastics used are stable, chemically inert and are not toxic so are suitable for normal soil conditions



EconoGrid 40 porous plastic paving grids have been designed to meet the demands laid down by local government regarding flood alleviation and WSUD requirements (Water Sensitive Urban Design). EconoGrid 40 pavers provide a porous / permeable pavement surface that allows rainwater / flood water to infiltrate through the paver surface and fill material into the subgrade below. EconoGrid 40 can be used as part of a source control layer within a WSUD design.



Product Range

Laid size for 4 grids cover 1m²

Product	Size (outer)	Grid per m ² laid	Paver Cell Depth	Load bearing Strength Capacity	Material	Colour
Econogrid 40	638mmx532mm	3	40mm	150T/m ²	100% Recycled PP/PE	Green



ECONOGRID 40™

POROUS PAVER GRASS FINISH



EconoGrid40™ is an economical porous reinforced grass paver used for creating permeable driveways and parking areas (residential and commercial). It's an environmentally friendly alternative to concrete. EconoGrid40™ meets the demands and loads imposed across a wide range of vehicle loads, frequencies of use and site conditions.

Applications:

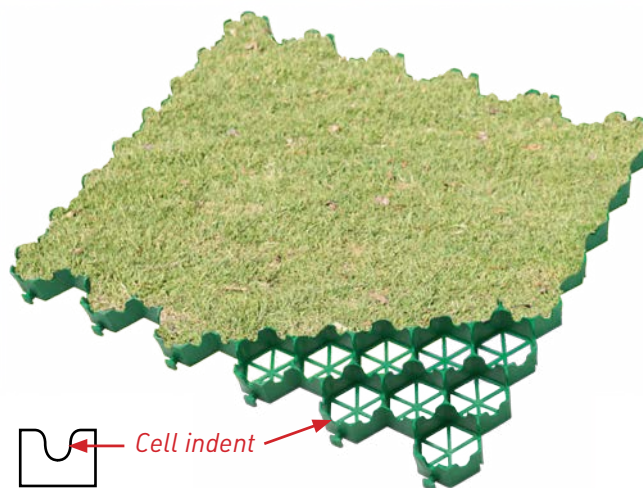
- Parking areas, grass or gravel
- Nature strip
- Caravan parks
- Emergency vehicle access
- Car and bus access

The 40mm cells on the EconoGrid40™ protect the grass roots from damage. The indent cell design allows grass runners to grow from cell to cell resulting in stronger and thicker grass surface.

EconoGrid40™ provides a vehicle access solution that costs less than concrete and is pervious enabling you to comply with soft landscaping regulations. Councils can require over 15% of commercial property to be soft landscape and up to 40% for residential.

Porous Paving systems reduce the need for expensive drainage solutions and storm water retention requirements whilst replenishing water to landscape areas and presenting an aesthetically pleasing site. Rainfall infiltrates into the ground minimising water run off.

Designed as a DIY installation All Stake Supply provides detailed downloadable installation instructions at www.grassreinforcement.com.au. Alternatively we can arrange landscape companies to install the grass protection products.





For technical and installation information visit:
www.grassreinforcement.com.au/econogrid-40

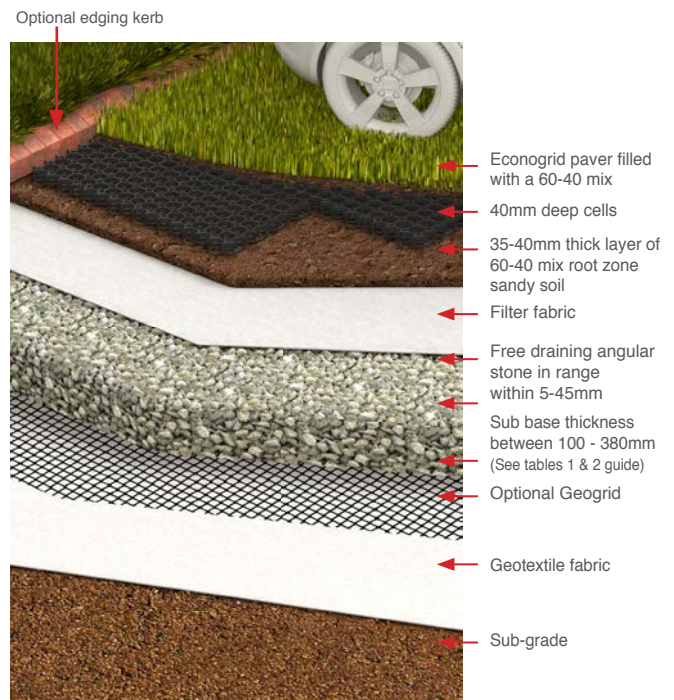


Features:

- Load bearing capacity up to 150 t/m²
- Manufactured from 100% high density polyethylene
- Tested in accordance with ASTM D1621-10
- Aesthetically pleasing and free draining reinforced surface
- Indent cells allow grass to spread and grow unencumbered
- Unique Interlocking system lends to a faster installation process
- Allowing you to park on grass

For optimum performance, lay the pavers onto 30-40mm of growing medium. The pavers will be backfilled with the same growing medium before the turf is rolled across the top. This gives the turf 70mm of growing medium. Anything less and the grass will require a higher frequency of watering and fertilizer.

The unique castellated design or cell indent in EconoGrid 40 is ideally suited for Buffalo grass as Buffalo does not have underground Rhizomes or (runners). The grass runners on the surface require the castellated design to spread from cell to cell. The unique design protects surface runners from being get cut or damaged by vehicles travelling over the grass. The EconoGrid 40 open cell structure is also highly suited to Kikuyu and Couch grass varieties whose Rhizomes grow underneath and on the surface.



Product Details

Product	Dimensions (mm) (L x w x d)	Grids per m ²	Weight	Material	Colour
EconoGrid40™	638x532x40mm	3 pavers	1.36kg per paver	Recycled polyethylene	Green

* All data and measurements are nominal

TRUCKGRID

HEAVYDUTY POROUS PAVERS



TruckGrid porous pavers are designed to be filled with gravel and provide a permeable pavement surface, capable of withstanding heavy weight vehicles that not only impose a vertical load-bearing force, but a dynamic force as vehicles drive over the surface.

Applications / Uses:

- Industrial / factory yards / outside storage areas
- HGV loading areas
- Forklift truck access areas
- Coach and bus parking
- Car parks
- Access roads
- Fire access lanes

Manufactured from recycled plastics, the plastic grids have a positive interlock which provides structural integrity. TruckGrid plastic grids should be installed onto a well prepared stone sub-base. This sub-base should be deep enough to support the required loads, and should be free draining to allow the water to permeate through the plastic grids, gravel, sub-base and into the sub-grade beneath. Please contact us for full installation guidance.

Features:

- Tested to DIN 1072, SLW 60
- Load-Bearing 10 tonnes per wheel / 20t axle loads
- Interlocking connections
- Thick 5mm cell walls
- Heavy weight 10.5kg/sqm

Councils can require 15% of commercial property to be porous or soft landscape. TruckGrid can satisfy this local government requirement whilst also providing a functional 24 hour vehicle access parking or forklift storage area.





For technical and installation information visit:
www.grassreinforcement.com.au/product/truckgrid



Each recycled plastic porous paving grid is 50cm x 40cm in size, making 5 grids per square metre.

TruckGrid provides heavy-weight ground reinforcement and stabilisation where vehicles impose a vertical and dynamic load as they drive over the area.

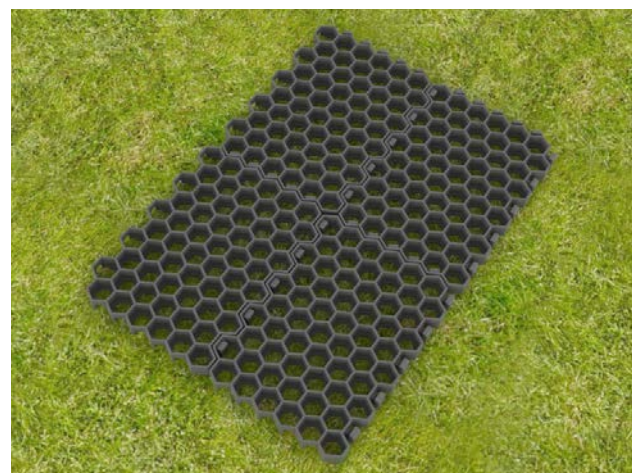
TruckGrid porous plastic paving grids can be included in your flood alleviation and WSUD (Water Sensitive Urban Design) solution. TruckGrid permeable pavers provide a porous / permeable pavement gravel surface that allows rainwater / flood water to infiltrate through the surface and fill material into the sub-grade below. The pavers are designed to be used as part of the source control element within a WSUD system.



Product Details

Grid Size	400mm x 500mm
Grid Cell Depth	40mm
Cell Wall Thickness	5mm
Weight	10.5kg/sqm
Material	Recycled HDPE
Load Bearing	20t axle loads
Colour	Black

* All data and measurements are nominal.



TRUCKGRID-MAX

HEAVYDUTY POROUS PAVERS



TruckGrid-MAX porous pavers are designed to be filled with gravel and provide a permeable pavement surface, capable of withstanding heavy weight vehicles that not only impose a vertical load-bearing force, but a dynamic force as vehicles drive over the surface.

TruckGrid-MAX provides a porous permeable surface that can meet heavy loading needs and can be used as part of a WSUD programme and so not contributing to / and adding to water overspill and flooding.

Typical Applications:

TruckGrid-MAX 80 nonslip are porous pavers that provide a solution to a wide range of trafficking needs. The applications and benefits would include:

- Intensive use car parking
- Truck parking
- Coach parks
- Heavy use pedestrian paths
- Fire access routes
- Loading bays
- Access routes for pumping stations, solar farms and electric relay stations.
- Drives and driveways where access to septic or oil tanks is needed

TruckGrid-MAX porous pavers can be filled either with a gravel or a suitable sand / soil mix for a grassed finish. The gravel should be 5mm to 10mm mixed sharp angular aggregate. Both finishes will give a very stable, hardworking and free draining working surface. The design of TruckGrid-MAX allows excellent stability resisting and negating dynamic and lateral loadings so the gravel or soils and paver remains in situ with little or no maintenance requirements.





For technical and installation information visit:
www.grassreinforcement.com.au/product/truckgrid-max



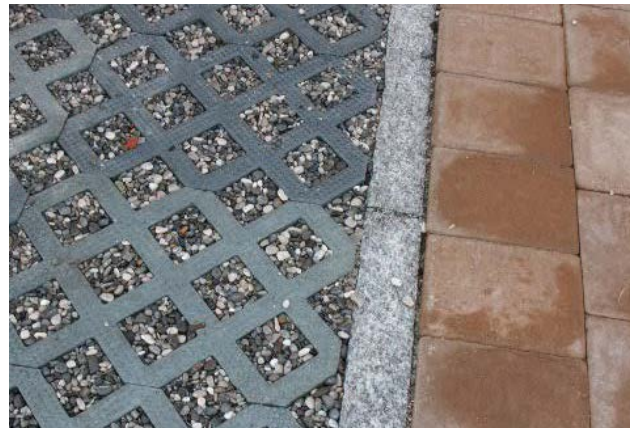
TruckGrid-MAX, when installed correctly will provide a hardwearing, robust and permeable free draining surface that would have an expected lifetime of many years. Please see our installation and design guidance documents for further information.

TruckGrid-MAX is supplied with a non-slip surface to entertain where the product would be installed on an incline. Please contact the technical team for guidance.

TruckGrid-MAX has been manufactured using 100% recycled plastics that have the qualities that are required for a strong, long-lasting, stable product suitable for the designed traffic load. These include:

- UV stabilisation to stop degradation by sunlight
- Capability to withstand movements and loadings of cars, vans, trucks, dustcarts, cranes, cherry pickers and forklifts
- Plastic selection to allow use in cold temperatures – some plastic will become fragile when cold
- Open structure to allow unhindered water permeability
- Paver design to maximum support and stability from either a gravel or a grass root structure

TruckGrid-MAX porous plastic paving grids have been designed to meet the demands laid down by local government regarding flood alleviation and WSUD (Water Sensitive Urban Design), requirements. TruckGrid-MAX pavers provides a porous / permeable pavement gravel surface that allows rainwater / flood water to infiltrate through the paver surface and fill material into the subgrade below.



Product Details

Product	Dimensions (mm) (l x w x d)	Grids per m ²	Weight	Material	Colour
TRUCKGRID-Max 80	600 X 400 X 80	4.17	9kg	Recycled Plastic	Grey

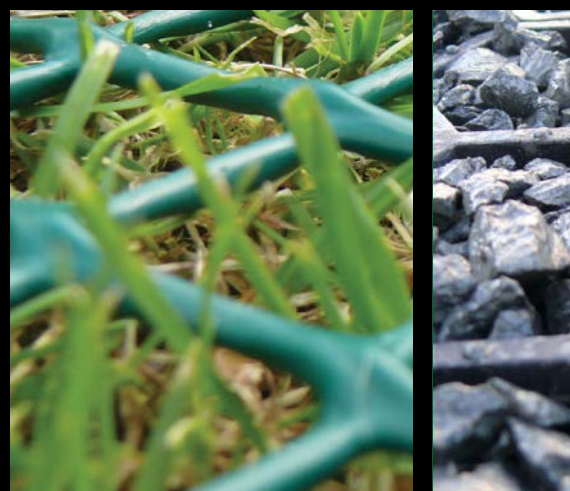
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Please note that the information enclosed is given as a guide only. All Stake Supply cannot be liable for damage caused by incorrect installation of this product. Final determination of the suitability of any information or material for the use contemplated and the manner of its use is the sole responsibility of the user and the user must assume all risk and responsibility in connection therewith.