



# AXIS

INDUSTRIES

**SERIOUS ABOUT SURFACING.**



**PERMEABLE GROUND STABILISATION TECHNOLOGY**

## What is Geohex?

The GEOHEX™ Erosion Control System is a unique and innovative ground stabilisation technology that is easy to use and quick to install.

GEOHEX™ is a permeable ground stabilisation technology that has been engineered for use in multiple applications ranging from soil & turf stabilisation for the enhancement of water saving measures to the reinforcement of roads in and around mine and construction sites.

With a load rating of 1200 tonnes per square metre the GEOHEX™ system is a safe and cost effective substitute for concrete in many applications. It is environmentally friendly and designed to reduce maintenance and logistic costs while at the same time increasing safety and water conservation.

Designed and manufactured in Australia to ISO9001:2014 standards GEOHEX™ is made from high impact resistant 100% recycled and recyclable co-polymer polypropylene.

### **GEOHEX™ can be used for soil, turf, embankment and road stabilisation in or around:**

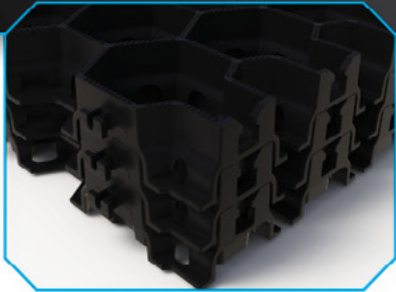
- Mining
- Resource development sites
- Tailings and waste dams
- Dump walls
- Residential developments
- Landscape engineering
- Civil projects
- Road works
- Tank farms
- Equestrian centres
- Sports grounds
- Council landfills
- Footpaths
- Marine parks
- Sheds and warehouses
- Factories and manufacturing centres
- Industrial estates
- Rural gateways
- Driveways
- Bush areas
- Golf courses
- Corporate parks
- Hospitals
- Playgrounds
- Helipads
- Bike tracks
- Parking areas
- Caravan parks



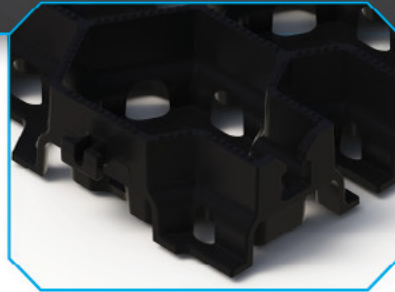
# Why Geohex?

The GEOHEX™ retention system delivers a range of benefits across a broad scope of applications:

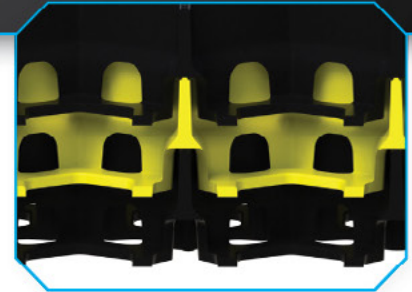
- Australian-made and supported for your peace of mind
- Can handle almost any load with Maximum Load Bearing Capacity of 1200 tonnes per square metre
- Easy and quick to install - only two lightweight pieces required to make one square metre
- Promotes ground and turf stabilisation
- Enables maximum use of land
- Reduces surface water runoff and promotes water conservation
- Lightweight and long-lasting
- Can be laid in any weather
- Minimum ground preparation required
- Helps control soil erosion
- Reduces labour and machinery costs
- Promotes site safety and wellbeing



Designed to nest neatly for safe and efficient storage and transport



Easy and simple connection system for fast installation



Custom colours available on request



## Mining, Civil & Earthworks

With the ability to withstand a maximum load of 1200 tonnes per square metre when filled with soil, GEOHEX™ can be used for the stabilisation of roads on mining, civil and earthworks sites as well as drainage stabilisation in hardstands, haul roads and equipment yards. GEOHEX™ can also be used in the stabilisation of mine site embankments, drains and airstrips.



## Rural

With its rigid design and a strong impact-resistant polymer construction, GEOHEX™ provides a cost-effective solution that prevents soft ground build up in heavy traffic livestock areas. GEOHEX™ promotes livestock flow and reduces the incidence of lameness around trough and standoff areas, approaches and exits to yards and many other high traffic livestock areas.



## Construction

With its unique design, GEOHEX™ is created to provide very strong ground reinforcement thanks to its open cell structure. In construction applications, GEOHEX™ can be combined with grass, gravel or a sand/soil mixture.



## Public Infrastructure

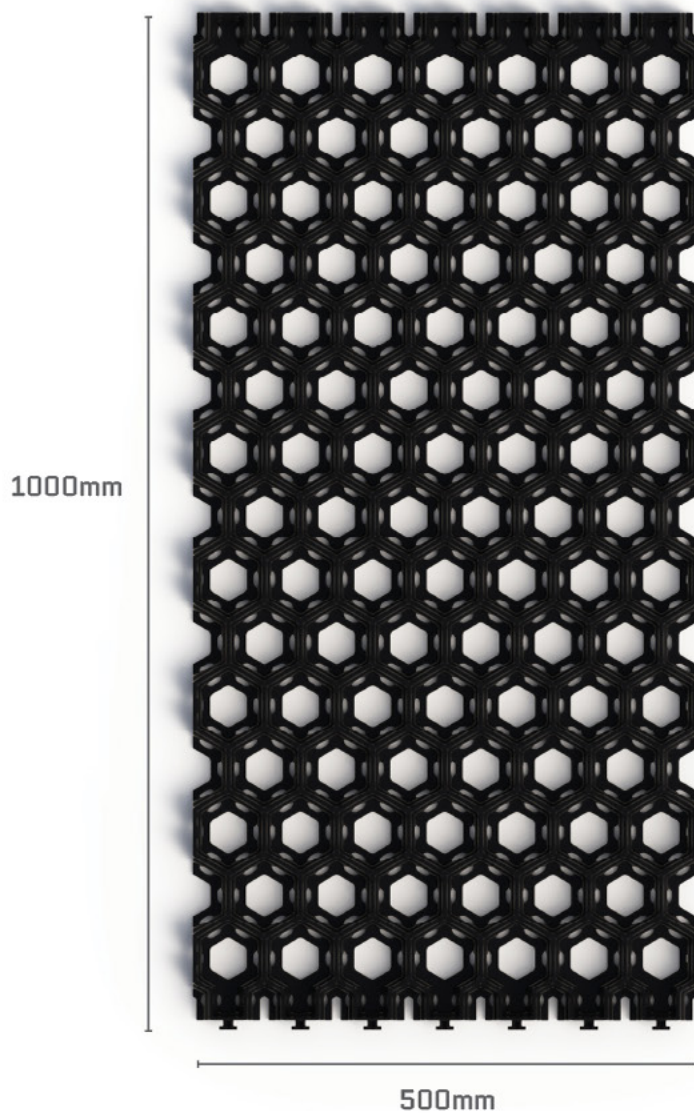
For the use of pavement and turf stabilisation, stormwater management, drainage, landscape projects, cycleways, beach access areas as well as in public housing estates, GEOHEX™ is ideal for the retention of stormwater, stabilisation of turf, paver support and for the reduction of dusty and muddy areas.

**GEOHEX™ has been independently certified as meeting the requirements of Good Environmental Choice Australia**



## Geohex Technical Specifications

- Injection moulded using high-impact UV-stabilised Copolymer Polypropylene
- Alternatively High Density Polyethylene (HDPE) for sub-zero applications
- Weight per grid: 2.3kg
- Dimensions: 500mm x 1000mm x 42mm
- 2 pieces of GEOHEX™ = 1 square metre
- Temperature range: - 45°C TO 155°C
- Water Permeability (installed): 99.7%
- Maximum Load Bearing Capacity (filled): 1200 tonnes square metre
- Colour: Black (Colour on request)
- Inert and non-reactive to solvents, oils, chemicals or water
- Can be installed in a variety of soil and geological configurations
- Non-toxic to humans, animals or plants
- Connection methods: clip locking system
- Manufactured from 100% recycled plastics
- Material is impervious to hydrocarbons
- 100% recyclable
- Quantity per pallet: 170 units (85 square metres per pallet)





# Infill Specification Chart

Suggested guide for filling material choice for the GEOHEX™ Erosion Control System.

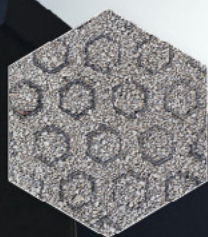
FILLING MATERIAL	PROCEDURE	COMMENTS
<b>Lime (crushed / granular)</b>	Use at a diameter of up to 15mm and ensure medium to high levels of compaction.	Avoid lime with a high clay content as the surface will become excessively slippery.
<b>Pumice</b>	Great for drainage and soft surface requirements.	Ensure good compaction and low sand content.
<b>Blue metal and recycled crusher dust</b>	Very good compacter and useful for exits and entry roads.	Needs thorough and uniform compaction.
<b>Rotten stone</b>	Good for bovine hooves and is also preferable for many other livestock.	Must be no bigger than 15mm in diameter. Can get slippery when wet. Must be soft enough to avoid damaging the GEOHEX™ Erosion Control System.
<b>Soil</b>	Only use where extremely soft surfaces are required. Ensure a very high level of compaction. Also good for areas where the promotion of turf growth is required.	Ensure the soil is clean and free of contaminants such as large rocks, metal or glass. Can be mixed with 10% to 15% washed sand.
<b>Miscellaneous</b>	Fine, rock or soil like material that is less than 20mm in diameter.	Any aggregate less than 14mm is ideally suited to this application.



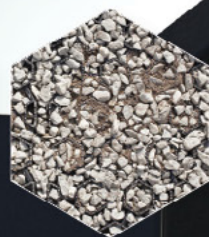
Lime



Pumice



Gravel



Rotten Stone

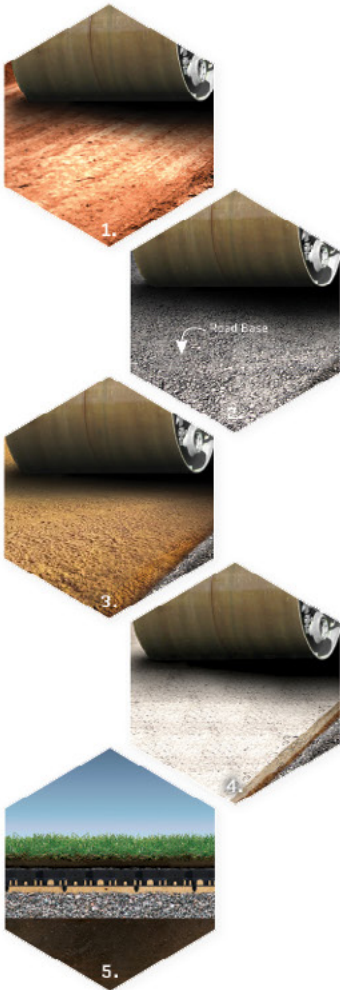


Soil

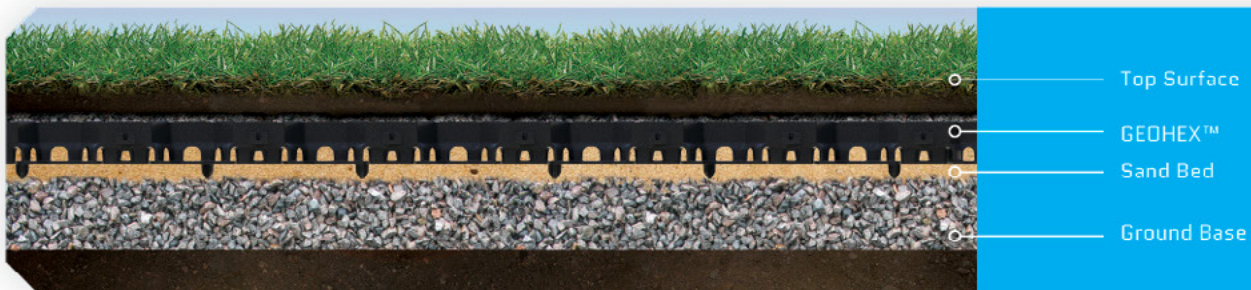


Sand

## How to Install Geohex



- 1.** Prior mechanical compaction of the soil and/ or ground base is essential for the successful performance of GEOHEX™.
- 2a.** If the surface is prone to movement, it may be necessary to install extra sub-soil drainage to maintain the strength and integrity of the topsoil.
- 2b.** Additional drainage technology used may consist of coarse road base, agricultural piping, sand or a combination of all of these. Fine road base may lower or even prevent the absorption of water.
- 3a.** It is recommended that a sand bed be placed under GEOHEX™ to construct a perfectly flat surface under the soil layer to prevent rutting and subsidence due to vehicular or livestock movement.
- 3b.** The sand bed under GEOHEX™ requires moderate compacting to ensure proper topsoil levelling. GEOHEX™ can then be placed right on top of this layer.
- 4a.** The best infill for GEOHEX™ is an angular stone up to 10-15mm in size, which locks together better and restricts any further slope movement.
- 4b.** Other recommended infill products include topsoil, sand and fine gravel.
- 5.** GEOHEX™ can be used with any type of turf configuration or variety. Areas that have had GEOHEX™ installed should be inspected regularly to determine if any damage or minor subsidence has occurred.



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