



STAND YOUR GROUND!

### What is Geohex?

Geohex is a unique permeable ground stabilisation technology that has a multitude of uses. From soil and turf stabilisation for the enhancement of water saving measures to the reinforcement of roads in and around mine sites, Geohex is a safe and cost-effective substitute for concrete with a load rating of well over 1200 tonnes per square metre\*.

Manufactured in Australia, under ISO9001:2008 quality standards, Geohex is easy to use, quick to install and manufactured from 100% recycled material.

#### 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

\*results are based on a filled product, Tested at the Centre for Geotechnical and Materials Modelling, The University of Newcastle.

# 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









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Easy and simple connection system for fast installation



Embossed numeric measurements make cutting to size easy

#### Mining

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 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.

#### Government

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
- 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
- 100% Recyclable
- Quantity per pallet: 272 units (136 square metres per pallet)



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# **Infill Specification Chart**

Suggested guide for filling material choice for the Geohex Erosion Control System.

FILLING MATERIAL	PROCEDURE	COMMENTS
Lime (crushed / granular)	Use at a diameter of up to 20mm and ensure medium to high levels of compaction.	Avoid lime with a high clay content as the surface will become excessively slippery. Also avoid material with a high blue metal content.
Pumice	Great for drainage and soft surface requirements.	Ensure good compaction and low sand content.
Blue metal and recycled crusher dust	Very good compacter and useful for exits and entry roads.	Needs thorough and uniform compaction.
Rotten stone	Good for bovine hooves and is also preferable for many other livestock.	Must be no bigger than 30mm in diameter. Can get slippery when wet. Must be soft enough to avoid damaging the Geohex Erosion Control System.
Soil	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.
Miscellaneous	Fine, rock or soil like material that is less than 20mm in diameter.	Avoid any fillings that have high stone content or sharp edges.





## How to Install Geohex

- 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.
- The use of weed sheets is also recommended to prevent further maintenance in turf areas using Geohex.
- 6. 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.

## www.geohex.com.au

#### A+ PLASTICS

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