

Hydrocell™

Superior Drainage Solution



Global Synthetics
Australian Company – Global Expertise



TUNNELS



SPORTS



PLANTER BOX



ROOF GARDEN

Hydrocell™ Superior Drainage System

General

Hydrocell™ is a unique modular drainage system designed to distribute and support vehicle and landscaping loads, whilst maintaining a positive drainage path for the collection and discharge of water.

In many buildings, owners and architects are recognising the importance of incorporating landscaping features that offer enhanced amenity for residents or workers in these buildings as well as offering significant thermal and environmental advantages.

Podiums, pedestrian areas, roof gardens, planter boxes and sporting fields will all benefit from having a reliable and efficient drainage system installed.

Other engineering structures, such as landfills, where the collection of leachates is required, will benefit from having an efficient system of collection and treatment of these highly polluted wastes such that they cannot re-enter ground water systems. Significant loads are generated in landfills with many metres of waste overlying the drainage system. **Hydrocell™** is able to withstand very high compressive loads.

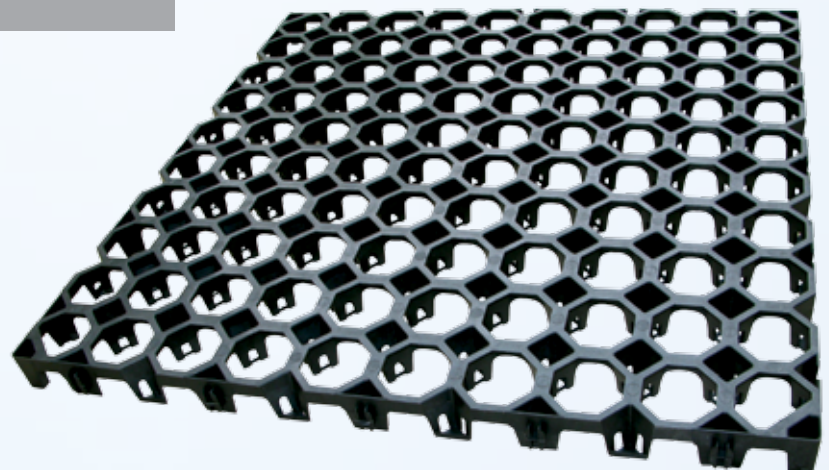
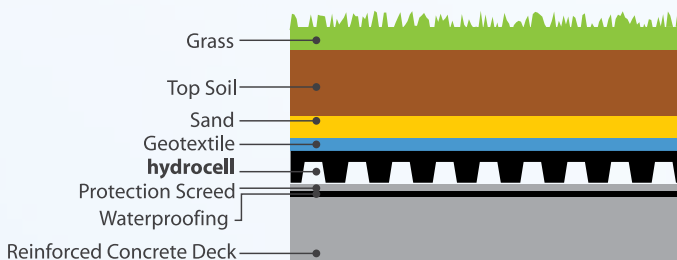
The **Hydrocell™** product comes in a convenient panel size with integral clips that make the task of installation very simple and economical.

To achieve best performance of the **Hydrocell™** system, ensure that any waterproofing has been applied and allowed to cure for the manufacturers recommended time prior to placement of the **Hydrocell™**. The installer may need to provide some additional protection to the membrane prior to placement of the **Hydrocell™** product.

The **Hydrocell™** is placed into position with the studs facing down. Once suitable areas of **Hydrocell™** are in positioned, a nonwoven geotextile such as ProFab® AS140 or Geofirma® AS 150A is placed on top of the **Hydrocell™**. Generally a minimum overlap of 300mm at joins of the geotextile should be maintained. It is advisable to place a minimum 150mm of clean washed graded sand above the geotextile and then placement of any additional soils above this layer.

Should you require additional placement advice please do not hesitate to contact you local Global Synthetics office.

TYPICAL DETAILS OF A ROOFTOP GARDEN



Hydrocell™ Superior Drainage System

Applications

Used in any application where a high compressive strength, positive drainage system is required. Such applications include planter boxes, roof gardens, wall drainage, playground areas, golf and sports fields as well as infrastructure works such as roads and landfill drainage.

Benefits

- Easy installation
- High compressive strength
- Lightweight with a very high strength to weight ratio
- Reduces rainfall run-off with a large open surface and high internal void ratio
- Durable with all Hydrocell™ made from polypropylene that is highly resistant to naturally occurring micro-organisms, acids and alkalis likely to be found in soils
- Environmentally friendly with the product able to be recycled if necessary
- Minimal maintenance
- Visually appealing
- More flexible profile than other 'rigid' panel system
- High flow rate

Specifications

PROPERTY		SPECIFICATION
Cell	(mm x mm)	600 x 500 with intergral clips
Cell Depth	(mm)	30
Mass	(kg/m ²)	2
Volume Void	(m ³)	0.027 per m ² of overall cell area (m ²)
Service Temperature	(°C)	-10 to +80
Colour		Black
Compressive Strength	(kPa)	≥ 1000
Discharge Capacity	(l/min/m)	≥ 360 @ i=0.01
Vertical Flow Rate	(l/min/m)	≥ 1000



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More about Global Synthetics

Global Synthetics is a 100% Australian-owned company, proud to offer a complete range of high-quality geosynthetic products backed by over 100 years of combined staff experience in the industry. We have supplied products to some of the largest recent infrastructure works in Australia. Global Synthetics provides major benefits to any geotechnical engineering project with the right products and our technical expertise.

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