

# GEOFABRICS A Green Drainage Panel Solution

Geofabrics has been providing geosynthetic solutions to the civil engineering market for over 40 years in Australia, New Zealand, Papua New Guinea and across the South Pacific.

On every project we undertake, we have a singular focus: to provide smarter solutions for our clients. For us, smarter infrastructure is about using smart products, smart solutions, and smart people to help our clients develop value engineering opportunities for their projects. We believe this delivers greater opportunities to lower risk, cost and construction time frames whilst increasing maintenance cycles and the whole of life opportunities.

#### **SUSTAINABILITY**

Geofabrics is committed to building a strong, sustainable future for Australia. We are making a positive environmental impact by manufacturing and supplying products that reduce our customer's carbon footprint.

Traditional drainage products are made from unsustainable virgin materials. **Megaflo® Green** is the only Australian made recycled alternative made from 100% recycled HDPE – with no compromise on product quality or performance. **Megaflo® Green** is more environmentally sound than any other drainage product in Australia, has a lower carbon footprint and helps reduce greenhouse gas emissions and reliance on fossil fuels.

#### INNOVATION & DEVELOPMENT

Geofabrics' Centre for Geosynthetic Research, Innovation & Development (GRID) is a specialist R&D laboratory that works with clients to develop the right geosynthetic solution for their complex problems.

Please speak to your local representative to understand how Geofabrics can assist you with your specific or bespoke drainage needs.

#### **AUSTRALIAN MADE**

Megaflo® Green is 100% Australian made with locally sourced recycled polymer. Many of the products we supply are manufactured in our two manufacturing plants in Albury (New South Wales) and Ormeau (Queensland).

We employ more than 100 manufacturing staff, and we support over 1,000 Australian suppliers, many located in regional Australia.

By choosing Geofabrics, you are not only supporting the local economy and reducing your product delivery lead time; you can rest assured that the product you receive meets project specifications - ensuring that performance and life-cycle costs are optimised.



Geofabrics is a proud member of the Infrastructure Sustainability Council of Australia (ISCA).

Megaflo® Green is now available on the ISupply directory. Find out how using Megaflo® Green on your next project can assist you in achieving IS credits.

#### SUPERIOR DRAINAGE

Megaflo® Green panel drain provides the dimensional stability and field-proven structural strength for quick, effective subsurface drainage. Megaflo® Green consists of a perforated HDPE core wrapped with bidim® Green nonwoven geotextile to prevent soil ingress into the drainage system.

Performance is the distinguishing feature of the panel drain due to its ability to collect and remove water rapidly. Compared to 100mm diameter round pipe, Megaflo® Green has twice the inflow capacity for an equivalent length and will drain water in less than 60% of the response time. Its slim 40mm wide profile permits faster and more cost-effective installation in a narrower trench. The design of the Megaflo® Green panel drain permits significantly higher flow velocity at the lower head.

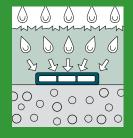
Megaflo® Green Ultra is a heavier grade offering greater crush resistance for extreme high fill, high load applications without compromising any of its proven flow.

#### **PERFORMANCE**



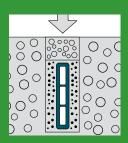
#### DRAINAGE

Removal of excess water from a structure whether it be a road, retaining wall or rail is key to long term performance of the structure. **Megaflo® Green** is a unique composite drainage system with an unsurpassed infiltration rate and rigid flow path which ensures effective drainage under the most challenging conditions.



#### RAPID RESPONSE TIME

A rapid removal of excess water is a key consideration in roads where excess water can result in significant damage to the pavement surface. The long flat shape of Megaflo® Green incorporates a high open area for the inflow of water - allowing rapid response time well over conventional drainage systems.



#### **STRENGTH**

Megaflo® Green panel utilises a ribbed structure to provide higher strength under traffic loads.

The properties of high compressive modulus, longitudinal stiffness and structural rigidity aids the mechanical performance of **Megaflo® Green**, ensuring the long term hydraulic flow capacity of the drain. High structural strength allows for a minimum cover depth of 100mm recommended in most applications

Megaflo® Green typically requires less backfill in comparison to a traditional trench which results in cost savings and faster installation.

#### **APPLICATIONS**

#### **ROADSIDE EDGE DRAINS**

Megaflo® Green provides a faster and higher inflow capacity due to its high trench installation profile and earlier interception of pavement infiltration. Megaflo® Green has a high compressive modulus and structural rigidity (preventing deflection under normal service loads), due to its elongated ribbed profile incorporating internal support.

# Use Megaflo® Green as roadside edge drains Pavers Bedding sand Drainage gravel Wrapped Megaflo® Green Natural soil

#### RAIL

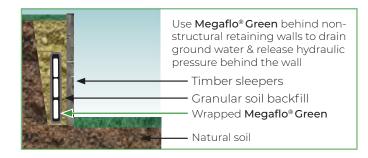
**Megaflo® Green** is manufactured as a corrugated panel supported by internal pillars along the length of the drain. This shape gives a high rush resistance whether the drainage system is used vertically or horizontally.

Bearing capacity of foundation material below ballast is affected by excess moisture unless adequate subsurface drainage is in place. **Megaflo® Green** has a profile that offers higher resistance to deformation and loss in discharge capacity required for use under rail track.

#### **RETAINING WALLS**

**Megaflo® Green** provides reliable drainage in specialist construction applications such as retaining walls, shotcrete walls and tunnels.

**Megaflo® Green** drainage system can be utilised vertically or horizontally to remove excess water, preventing the build up of water pressures induced on the structure.



#### **MINING**

**Megaflo® Green** is ideally suited for use as collector drains in mining applications. Its high compressive modulus and structural rigidity prevent deflection and the loss of flow capacity under high load or localised settlement



The high compressive strength of **Megaflo® Green** under normal and inclined loads makes it the ideal product for a range of landfill drainage applications.



#### **ADVANTAGES**



#### **COST EFFECTIVE**

The narrow trench width requirement, coupled with easy and rapid installation of **Megaflo® Green** drastically reduces costs on your project, compared to traditional draining systems.

Furthermore, with a high vertical crush strength, **Megaflo® Green** can be installed closer to the surface, reducing excavation costs.



#### **ENHANCED PERFORMANCE**

The increased height and rapid response times associated with **Megaflo® Green** ensures the system outperforms traditional drainage options. The flat pipe construction prevents intrusion of the cover geotextile allowing flow rates to be maintained despite soil confinement pressure.



#### **ENVIRONMENTALLY SUSTAINABLE**

**Megaflo® Green** is manufactured from recycled HDPE, minimising the carbon footprint of the project.

#### **MEGAFLO® GREEN DIMENSIONS**

PRODUCT DESCRIPTION	HEIGHT	ROLL LENGTH
Megaflo® Green 170	170mm	50m or 100m
Megaflo® Green <b>300</b>	315mm	50m or 100m
Megaflo® Green <b>450</b>	450mm	50m or 100m
Megaflo® Green <b>900</b>	900mm	50m

#### **FITTINGS**

A full range of fittings are available to compliment Megaflo® Green. The fitting will assist you in:

- Connecting Megaflo® Green to round pipe in roads, basement walls, shotcrete and retaining wall applications.
- Finish lengths of Megaflo® Green with end caps.
- Pin the Megaflo® Green to the surface, for stability in windy conditions.

Please use the QR code to view the full range of standard and non-standard Megaflo® Green fittings.

#### **OUTLET FITTINGS**



OUTLET (EO)

Contact your nearest sales branch for our nonstandard Megaflo® Green fittings.

# **GEOFABRICS**®

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products directly contribute to IS credits in infrastructure and civil engineering projects.

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