Megaflo® Panel Drain System

General Brochure













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

Performance is the distinguishing feature of the panel drain due to its ability to rapidly collect and remove water. Compared to 100mm diameter round pipe, **Megaflo®** 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®** panel drain permits significantly higher flow velocity at lower head.

FUNCTIONS



Drainage

Removal of excess water from a structure whether it be a road, retaining wall or sports field is key to long term performance of the structure. **Megaflo**® 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

Rapid removal of excess water is a key consideration in roads and sports fields where excess water can result in significant damage to the pavement or limit the playability of the sports surface. The long flat shape of **Megaflo**® incorporates a high open area for inflow of water - allowing rapid response time well in excess of conventional drainage systems.







Vertically installing the **Megaflo**® drainage panel utilises the 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**®, ensuring the long term hydraulic flow capacity of the drain. High structural strength allows for a minimum cover depth of 100mm, recommended for **Megaflo**® in most applications. **Megaflo**® typically requires less backfill in comparison to a traditional trench which results in cost savings and faster installation.



GEOFABRICS®

APPLICATIONS

ROADSIDE EDGE DRAINS

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

Simple installation techniques provide installation savings compared to a traditional round pipe drainage system.



SPORTS FIELDS

Sports field surfaces endure high traffic, which if not drained adequately, results in costly and time consuming maintenance. Adequate drainage requires the fast and effective removal of water after a storm.

The use of narrow width **Megaflo**[®] flat panel drain ensures minimal disruption of the existing sports surface with a simple, cost effective installation process.



RETAINING WALLS

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

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



LANDFILL

Landfill leachate and gas collection systems are an integral part of landfill design for lining and capping systems.

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



MINING

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

Megaflo® Ultra is available for the rapid drainage of tailing dams.



GOLF COURSES

The trenchless option of **Megaflo®** laid directly onto the subgrade results in significant savings in man-hours and material compared to traditional round pipe.

Regardless of the subgrade soil type, all golf courses can benefit from improved drainage using **Megaflo**[®].



ADVANTAGES OF MEGAFLO® DRAINAGE SYSTEMS

High Crush Strength	The high vertical crush strength means Megaflo® can be installed closer to the surface reducing the cost of excavation.
Enhanced Performance	The increased height and rapid response times associated with Megaflo® 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.
Cost Effective	The narrow trench width requirement combines rapid installation of the geotextile encapsulated Megaflo® to provide significant cost savings when compared to traditional French drain systems.
Environmentally Friendly	Megaflo® is manufactured from recycled HDPE, minimising the carbon footprint of the project.

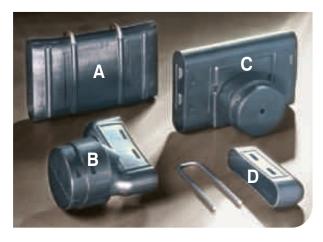
MEGAFLO® DIMENSIONS

Megaflo® Products:							
Product Description	Height	Roll Length					
Megaflo® 170	170mm	50m or 100m					
Megaflo® 300	315mm	50m or 100m					
Megaflo® 450	450mm	50m or 100m					
Megaflo® 900	900mm	50m					

FITTINGS

A range of standard **Megaflo**[®] fittings are available:

- Megaflo® couplers are a high strength, secure means to join continuous sections of Megaflo®, inserted beneath the geotextile.
- Connecting to 100mm diameter round pipe is easily achieved using either the Megaflo® side outlet or Megaflo® end outlet where required.
- Megaflo® end caps can be fitted to terminations to prevent backfill ingress into the system. Other fittings are available for connecting Megaflo® in various arrangements depending on the application.



Fittings are available to suit all Megaflo® sizes:

Α	Joiner Coupling	С	Side Outlet
В	End Outlet	D	End Cap

GEOFABRICS® is a registered trade mark of Geofabrics Australasia Pty Ltd.

MELBOURNE (03) 8586 9111 Fax: (03) 8586 9186	SYDNEY (02) 8785 8800 Fax: (02) 9821 3670	NEWCASTLE (02) 4950 5845 Fax: (02) 4950 5895	(02) 6653 5706 Fax: (02) 6653 5706	PERTH (08) 9249 5411 Fax: (08) 9249 5447	ADELAIDE (08) 8162 5855 Fax: (08) 8162 5755
HOBART (03) 6273 0511 Fax: (03) 6273 0686	BRISBANE (07) 3279 1588 Fax: (07) 3279 1589	TOWNSVILLE (07) 4774 8222 Fax: (07) 4774 8655	BUNDABERG (07) 4155 9968 Fax: (07) 4155 9968	GOLD COAST (07) 5594 8600 Fax: (07) 5563 3727	DARWIN 0407 523 669 Fax: (08) 8162 5755

GEOFABRICS.COM.AU



IMPORTANT NOTICE - DISCLAIMER

The information contained in this brochure is general in nature. In particular the content of this brochure does not take account of specific conditions that may be present at your site. Site conditions may alter the performance and longevity of the product and in extreme cases may make the product wholly unsuitable. Actual dimensions and performance may vary. If your project requires accuracy to a certain specified tolerance level you must advise us before ordering the product from us. We can then advise whether the product will meet the required tolerances. Where provided, installation instructions cover installation of product in site conditions that are conducive to its use and optimum performance. If you have any doubts as to the installation instructions or their application to your site, please contact us for clarification before commencing installation. This brochure should not be used for construction purposes and in all cases we recommend that advice be obtained from a suitably qualified consulting engineer or industry specialist before proceeding with installation. © Copyright held by Geofabrics Australasia Pty Ltd. All rights are reserved and no part of this publication may be copied without prior permission.

