

# Megaflo®

General Brochure



## Geocomposite Panel Drain System



Quality  
ISO 9001  
Cert. No. QEC1773



RECYCLED



Please read the important notice at the end of this brochure

## Introduction

**Megaflor<sup>®</sup>** geocomposite panel drain provides the dimensional stability and field-proven structural strength for quick, effective subsurface drainage. **Megaflor<sup>®</sup>** consists of a perforated recycled HDPE core wrapped with **bidim<sup>®</sup>** 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, **Megaflor<sup>®</sup>** has twice the inflow capacity for an equivalent length and will drain a given quantity of 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.

**Megaflor<sup>®</sup>** is not round, but its panel shaped core fully encloses the waterway. Lateral pillars maintain the core opening, resulting in a series of oval shaped channels providing superior strength and relatively few projections into the waterway. The design of the panel permits significantly higher flow velocity at lower head.

A number of key features make **Megaflor<sup>®</sup>** the superior choice:

### Quality

Manufactured to ISO 9001:2008 Quality Management System Standards  
QA testing in NATA certified laboratories

### Support

Technical support from Australia's largest team of geosynthetic specialists  
Stocked in all Australian cities  
Installation equipment available  
Design support available

### Expertise

Over 15 years of installations throughout Australia  
Supported by an ongoing R&D program

Megaflor <sup>®</sup> Products:		
Product Description	Height	Roll Length
<b>Megaflor<sup>®</sup> 170</b>	170mm	50m or 100m
<b>Megaflor<sup>®</sup> 300</b>	315mm	50m or 100m
<b>Megaflor<sup>®</sup> 450</b>	450mm	50m or 100m
<b>Megaflor<sup>®</sup> 900</b>	900mm	50m

Panel	Test Method	MEG170	MEG300	MEG450	MEG900
Panel Height (nominal)	ASTM D2122	170mm	315mm	450mm	900mm
Panel Width	ASTM D2122	>40mm			
Slot Size (min)	ASTM D2122	2.0mm x 25mm			
Compressive Strength	ASTM D2412 (mod)	>200kPa			
Stiffness @ 5% Deflection	AS2439 (mod)	>1000kN/m/m	n/a	n/a	n/a
Planar Flow @ 0.01 Gradient & 200kPa Confining Pressure	ASTM D4716	Rigid plate interface - 130 l/min/m width Coarse sand interface - 130 l/min/m width			

### Geotextile (Typical Values)

Property	Wide Strip Tensile Strength	Trapezoidal Tear Strength	Pore Size	Flow Rate @ 100mm Head
Test	AS3706.2-00	AS3706.3-00	AS3706.7-90	AS3706.9-01
<b>bidim<sup>®</sup> A14</b>	9.5kN/m	270N	110µm	235 l/m <sup>2</sup> /sec

**bidim<sup>®</sup>** nonwoven, needle-punched polyester geotextile complies with road authority specifications ranges: New South Wales RTA R63 (Ed 2, Rev 0), Queensland MRTS 27 (June 2009) & NZ Transit TNZ F/7 (2003).

The data and specifications contained in this table are obtained from the manufacturer's laboratory testing. To ensure this information is current please contact your local branch of Geofabrics Australasia.

## 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.



### Sports Fields

Sports field surfaces endure high traffic, which if not drained adequately, results in costly and time consuming maintenance. Adequate drainage requires not only the removal of excess water, but also fast and effective response to rainfall.

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



### 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 high load applications in mining.



### Golf

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

Regardless of the subgrade soil type, (sand or clay base) all golf courses can benefit from improved drainage using **Megaflo®**.



## Fittings

A range of standard **Megaflor<sup>®</sup>** fittings are available. **Megaflor<sup>®</sup>** couplers are a high strength, secure means to join continuous sections of **Megaflor<sup>®</sup>**, inserted beneath the geotextile.

Connecting to 100mm diameter round pipe is easily achieved using either the **Megaflor<sup>®</sup>** side outlet or **Megaflor<sup>®</sup>** end outlet where required.

**Megaflor<sup>®</sup>** end caps can be fitted to terminations to prevent backfill ingress into the system. Other fittings are available for connecting **Megaflor<sup>®</sup>** in various arrangements depending on the application.



**Fittings are available to suit all Megaflor<sup>®</sup> sizes:**

- A - Joiner Coupling
- B - End Outlet
- C - Side Outlet
- D - End Cap

Contact your local branch for the complete range of fittings.

## Installation

For information on **Megaflor<sup>®</sup>** details and installation guidelines, please contact your local Geofabrics office.

## Why Megaflor<sup>®</sup>?

### Features:

- Australian made
- Made from recycled HDPE
- Compact components
- Narrow width
- Composite product
- High crush strength
- Rigid core
- High velocity discharge
- Fully enclosed core

### Benefits:

- Low installation cost
- Three dimensional stability
- High compressive modulus
- Solid waterproof invert
- Fast drainage response time
- High infiltration capacity
- Low cover requirement
- Efficient retrofit option
- Durable HDPE

### IMPORTANT NOTICE - DISCLAIMER

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