## Megaflo® Panel Drain System

Technical Data Sheet





## **Description**

The **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 slotted round pipe, **Megaflo**<sup>®</sup> has twice the inflow capacity for an equivalent length and will collect and drain 60% more water in a similar time frame.

Its slim 40mm wide profile permits faster and more cost effective installation in a narrower trench.

## **Specifications**

Megaflo® Panel Properties		Test Method	Units	Meg170	Meg300	Meg450	Meg170 Ultra	Meg300 Ultra	Meg450 Ultra
Panel Height (Typical)		ASTM D2122	mm	170	315	460	170	315	460
Panel Width		ASTM D2122	mm	> 40			> 40		
Slot Size		ASTM D2122	mm	2.8 x 30			2.8 x 30		
	Horizontal	ASTM D2412 (mod)	kPa	> 200			> 300		
Compressive Strength <sup>1,2</sup>	Vertical				> 300			> 400	
Planar Flow @ 0.01 Gradient & 200kPa Confining Pressure	Rigid Plate Interface	40TM D 4740	111 / 1	25	47	68	25	47	68
( <b>Megaflo</b> ® installed horizontally)	Coarse Sand Interface	ASTM D4716	litres/min	25	47	68	25	47	68
Planar Flow @ 0.1 Gradient & 200kPa Confining Pressure (Megaflo® installed horizontally)	Rigid Plate Interface	ASTM D4716	litres/min	66	122	178	66	122	178
	Coarse Sand Interface			66	122	178	66	122	178
Change in Core Cross-sectional Area under confining pressure of 156.5 kPa		ASTM D6244	%	< 5%		< 5%			

<sup>1.</sup> The compressive strength of **Megaflo**® should be considered in conjunction with the granular drainage medium. Geofabrics engaged an external consultant to perform a Finite Element Analysis which established that under extreme loads, the effective stress imposed on a **Megaflo®** panel due to it's stiffness and profile is significantly reduced through soil arching of the granular cover.

2. Geofabrics has also conducted compressive testing in a purpose made crush test rig to show Megaflo® can withstand extreme loads of up to 1580kPa due to the soil arching effect of the granular fill.

Geotextile Properties	Wide Strip Tensile Strength	Trapezoidal Tear Strength	Pore Size	Flow Rate @ 100mm Head	
Test	AS 3706.2	AS 3706.3	AS 3706.7	AS 3706.9	
bidim <sup>®</sup> A14	11 kN/m	300 N	110 <i>μ</i> m	320 l/m²/sec	

**bidim®** nonwoven geotextile complies with the following road authority specifications ranges: New South Wales RMS R63 (May 2003, Ed 4, Rev 0), Queensland MRTS 27 (June 2009), MRTS 03 (October 2010), MRTS 38 (August 2011), NZ Transit TNZ F/7 (2003).

While **Megaflo**® comes standard with **bidim**® **A14**, Australian manufacturing allows flexibility of geotextile choice to suit site conditions. Performance testing is available at the Geosynthetic Centre of Excellence to determine filter suitability in critical applications.

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. The product values listed on this sheet are Typical Values.



## OTHER LITERATURE AND TECHNICAL INFORMATION AVAILABLE

Literature can be sourced from the Geofabrics website or by contacting your nearest branch



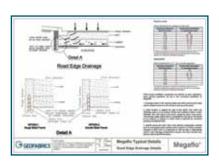
Megaflo® General Brochure



Megaflo® Installation Guidelines



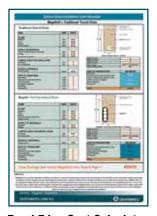
Megaflo® Fittings



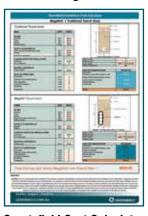
**CAD Drawings** 



**Promotional Video** 



**Road Edge Cost Calculator** 



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Megaflo® Model Specification

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**AUSTRALIA** 

**MELBOURNE** (03) 8586 9111 BRISBANE

(02) 8785 8800 **TOWNSVILLE** (07) 3279 1588 (07) 4774 8222

> **HAMILTON** (021) 732 178

SYDNEY

**NEWCASTLE** (02) 4951 2688 **BUNDABERG** (07) 4155 9968

**NAPIER** 

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**GOLD COAST** (07) 5594 8600

(08) 8162 5855 (08) 6305 0561 **HOBART DARWIN** (03) 6273 0511 0407 523 669

PERTH

**NEW ZEALAND** 

AUCKLAND (64 9) 634 6495

(021) 916 736

**CHRISTCHURCH** (64 3) 349 5600

**GEOFABRICS.COM.AU GEOFABRICS.CO.NZ** 













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