MEGAFLO® GREEN

PANEL DRAIN & SUBSOIL DRAINAGE SYSTEM

TECHNICAL DATA SHEET

The 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 rapidly collect and remove water. Compared to slotted round pipe, **Megaflo® Green** 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.

ADVANTAGES:

VERTICAL CRUSH STRENGTH	The high vertical crush strength means **Megaflo® Green** can be installed closer to the surface reducing the cost of excavation.
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.
COST EFFECTIVE	The narrow trench width requirement combines rapid installation of the geotextile encapsulated **Megaflo® Green** to provide significant cost savings when compared to traditional French drain systems.
ENVIRONMENTALLY FRIENDLY	**Megaflo® Green** is manufactured from recycled HDPE, minimising the carbon footprint of the project.

GEOFABRICS®
Smarter Infrastructure

Megaflo® Green - Technical Data Sheet

Megaflo® Green panel drain is made in Australia, manufactured in a facility certified to ISO9001, Certificate No. FS673633.

MEGAFLO PANEL PROPERTIES		TEST METHOD	UNITS	MEG170G	MEG300G	MEG450G	MEG170G ULTRA	MEG300G ULTRA	MEG450G ULTRA
Panel Width		ASTM D2122	mm	170	315	460	170	315	460
Slot Size		ASTM D2122	mm	> 40			> 40		
Wide Strip Tensile[1]		ASTM D2122	mm	2.8 x 30			2.8 x 30		
Compressive Strength [1,2]	Horizontal	ASTM D2412 (mod)	kPa	> 200			> 200		
	Vertical			> 300			> 300		
Planar Flow @ 0.01 Gradient & 200kPa Confining Pressure (***Megaflo® Green*** *installed horizontally)*	Rigid Plate Interface	ASTM D4716	litres/min	25	47	68	25	47	68
	Coarse Sand Interface			25	47	68	25	47	68
Planar Flow @ 0.1 Gradient & 200kPa Confining Pressure (***Megaflo® Green*** *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%		

1. The compressive strength of **Megaflo® Green** 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® Green** 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® Green** can withstand extreme loads of up to 1580kPa due to the soil arching effect of the granular fill.

While **Megaflo® Green** comes standard with **bidim® Green** A14G, 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.

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® A14G	11 kN/m	300 N	110 µm	320 l/m2/sec

bidim® Green nonwoven geotextile complies with the following road authority specifications: TfNSW R63, Queensland MRTS 27, MRTS 03, MRTS 38, NZ Transit TNZ F/7.

M160G-08/20

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Proud member of the Infrastructure Sustainability Council of Australia (ISCA). Our products directly contribute to IS credits in infrastructure and civil engineering projects.