

MEGAFL8™

Geocomposite Panel Drain System



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Megaflo™ product benefits

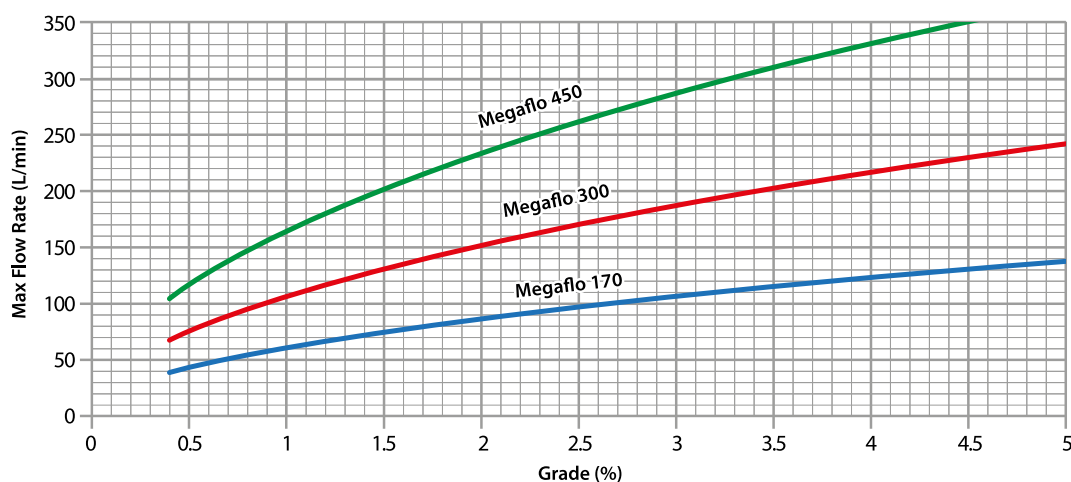
- **Megaflo™** has a formed invert at the bottom of the panel preventing loss of water into the base soils.
- **Megaflo™** has an open waterway with little restriction from support legs for high flow rates.
- **Megaflo™** has a high crush resistance which means the panel will not buckle or 'J' during installation.
- **Megaflo™** has a high vertical crush strength allowing reduced cover depths even under highway applications.
- **Megaflo™** has a HDPE core for high chemical resistance which is especially important for leachate collection and heap leaching applications.
- **Megaflo™** is completely wrapped in bidim®, a nonwoven needlepunched geotextile providing the optimum filtering performance in most soils.
- **Megaflo™** has a bidim® filter fully supported by the core so it will not intrude or burst.

Flow Capacity

Pavement edge drains should always be installed so that the flow zone is maintained at a level at or below the sub-base interface. This ensures that the drain is functioning as a collector of water at all times and not allowing water back into the pavement structure. Drainage system design based on the flow zone at

one third of the panel height provides a safety factor for drainage system capacity. The one third height flow rate combined with the distance between outlets will determine the required size of **Megaflo™** for most installations. Flow rates at one third panel height are shown below.

Megaflo™ Flow Chart (Vertical) - ASTM D4716



Note: The flow capacities in the horizontal are 80% of the flow capacities in the vertical.

Specifications

Panel		MEG170	MEG300	MEG450	
Panel Height (Nominal)		ASTM D2122	170 mm	315 mm	460 mm
Panel Width		ASTM D2122	> 40 mm		
Slot Size (Minimum)		ASTM D2122	2.8 mm x 30 mm		
Compressive Strength	Horizontal	ASTM D2421 (Mod)	> 200 kPa		
	Vertical		> 300 kPa		
Change in Core Cross-sectional Area under confining pressure of 156.5 kPa		ASTM D6244	< 5 %		
Geotextile Bidim A Grade polyester, nonwoven, needle punched continuous filament geotextile					
Mass		AS3706.1	140 g/m²		
Thickness		AS3706.2	1.3 mm		
Throughflow		AS3706.9-01	320 l/sec/m² (under 100 mm head)		
Permeability		AS3706.9-01	33 x 10 ⁻⁴ m/s		
Pore Size		AS3706.7-03	110 micron		

Applications

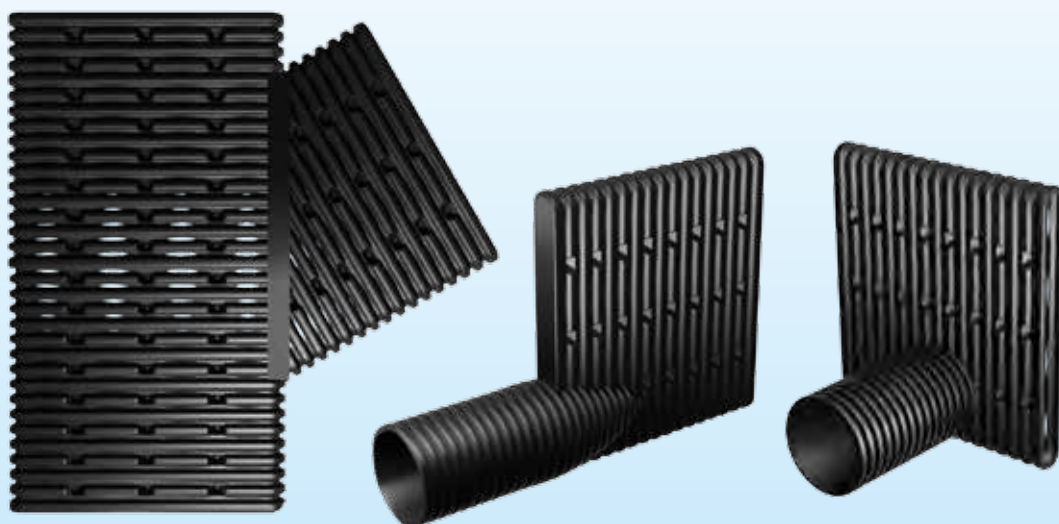
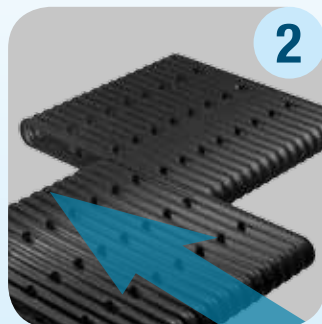
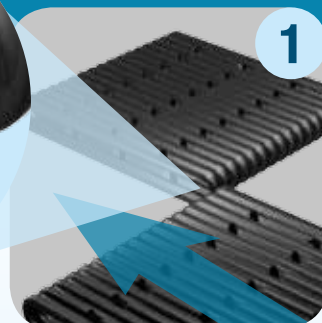
Megaflo™ is a cost effective and easy-to-install solution for all subsoil drainage works including:

- Roadside edge drains;
- Under kerb drainage;
- Cross drainage across highways;
- Under drains for road widening;
- Sportsfield drainage;
- Vertical drainage behind retaining walls;
- Vertical drainage behind shotcreting;
- Leachate collection drains;
- Mine tailings and heap leach drains.
- Piggy back drains.



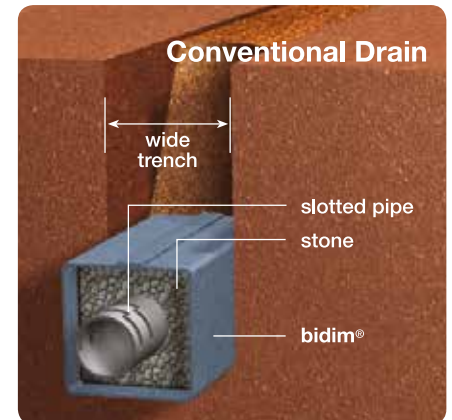
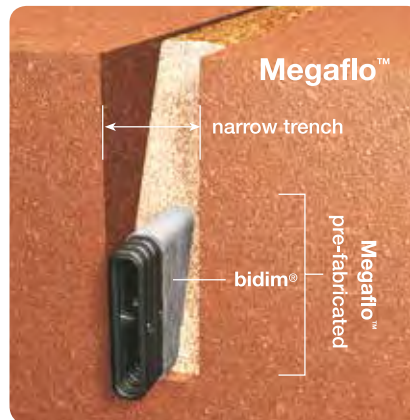
Fittings

Megaflo™ is v-notched and interlocked at the ends. Ends and side outlet fittings are available. T-pieces and Y-junctions are custom made. Ensure the geotextile is wrapped completely around the coupler to prevent ingress of fine soil particles into the drain.



Megaflo™ installation benefits

- **Megaflo™** panel drains are installed in narrow trenches requiring less excavation and reinstatement than conventional drains.
- **Megaflo™** panel drains are ideal for retrofitting as they cause very little disturbance to the existing roadway.
- **Megaflo™** panel drains provide rapid response times therefore reducing the time moisture remains in the pavement.



Installation

While actual installation procedures are specific to each application, some general guidelines will aid in the successful installation of **Megaflo™**.

- Excavate trench to the required depth and width ensuring that there will be sufficient* cover from the surface to the top of the panel.
**Typically this is between 100 mm & 300 mm depending on the loading.*
- Panel location is against the side of the trench from which the infiltrating water is to be drained. Where site conditions result in water infiltration from both sides of the trench, locate the drain in the centre. This will also apply where there is a potential for the side of the trench to be undercut or subside or where there is potential for excessive pumping of subgrade fines.
- Backfill around the drain with a free draining compactable material such as well graded clean washed sand or gravel. Compact to 95% Mod AASHTO in a maximum of 150 mm lifts or alternatively wash in sand drainage material then compact. No fines concrete may also be used to backfill the trench.



DISCLAIMER: The application, handling and conditions of use of our products are critical and beyond our control. Information given by us in our documentation or orally, or by any employee or agent and any advice, recommendation or assistance, is given in good faith but without creating any obligation or warranty.

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