PRODUCT INFORMATION

P1

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Product code: PSM1BM

Permavoid Medium Duty with Biomat is designed for use with Polystorm attenuation and infiltration systems and comprises of a tri-laminate of low density plastic composite (biomat). The biomat floats on water and is designed to intercept and treat any potential residual emulsified oils that may be present within the surface water. The use of Permavoid Medium Duty with Biomat provides additional oil retention and water treatment capability to an underground water storage system.



Applications

The Permavoid Medium Duty with Biomat units are suitable for use as a stormwater retention, infiltration or attenuation system. Used to provide hydrocarbon treatment, they are suitable for a range of applications including, retail, residential, commercial and off road car parking.

Key Benefits

- Pollutant-intercepting floating mat degrades residual oils by absorption and aerobic digestion
- Can be incorporated into Polystorm retention, infiltration and attenuation systems
- 95% void ratio
- Light in weight yet robust excellent health & safety and installation benefits
- 60 years creep limited life expectancy
- 100% recyclable
- Units are manufactured from recycled materials

Performance

The structural load bearing capacity of the Permavoid units have been tested in accordance with CIRIA C680. The structural design life is a minimum 60 years.

The units provide 3D flow and have a void ratio of 95%.

Technical Support

Detailed guidance and assistance is available. For further information, please contact our Technical Team on +44 (0) 1509 615 100 or email civils@polypipe.com or visit www.polypipe.com/civils-technical-hub

ELEMENT	VALUE			
PHYSICAL PROPERTIES				
Length	1m			
Width	0.5m			
Depth	0.4m			
Total volume	0.2m ³			
Unit weight	9kg			
Unit storage volume	0.19m³ (190 litres)			
Void ratio	95%			
SHORT TERM COMPRESSIVE STRENGTH				
Vertical	Maximum 610 kN/m ²³			
Lateral	Maximum 63 kN/m ² *			
SHORT TERM DEFLECTION				
Vertical	60 kN/m² per mm			
Lateral	4.4 kN/m² per mm			
OTHER PROPERTIES				
Intrinsic permeability (k)	Minimum 1.0 x 10 ⁵			
Oil retention	56g/m²			
Effluent discharge at max. oil loading	10ppm			

Note: Permavoid Medium Duty with Biomat is ideal for use in trafficked and pedestrian applications subject to a structural design check and suitable installation conditions.

Each unit includes 4 clips and 2 shear connectors.

* Compressive strength at yield, maximum recommended value for design purposes.



Permavoid – Medium Duty with Biomat

Data Sheet

PRODUCT INFORMATION

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Permavoid - Medium Duty with Biomat can be utilised in these SuDS techniques

TECHNIQUES													
Blue-Green roofs	Podium Decks	Trees	Sports Pitches	Cycle Paths	Permeable Paving (sub base & podium)	Bioretention & Rain Gardens	Attenuation Storage Tanks	Infiltration	Swales	Filter Drains	Detention Basins	Ponds & Wetlands	Filter Strips
			✓			✓	✓	√	√	√	✓	✓	

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