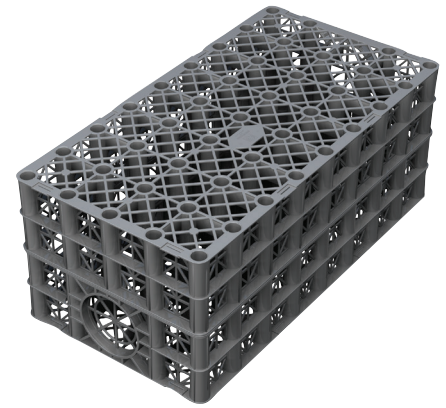


Product code: PSM1

The Polystorm cell made of virgin material, has a 44 tonnes/m<sup>2</sup> compressive strength. It is ideally suited for retention, attenuation or infiltration under trafficked or loaded areas at greater depths, such as car parks, housing and commercial developments. An efficient and versatile solution for SuDS compliance, it is hard-wearing, light in weight and provides a 95% void ratio for maximum water capture.



## Applications

The Polystorm modular cells are combined to form a structure that receives rainwater collected from roofs of surface drains. The rainwater is then either attenuated by the structure, when wrapped in an impermeable membrane, or infiltrated by the structure, when wrapped in a permeable geotextile.

## Key Benefits

- Compressive strength of 44 tonnes/m<sup>2</sup>
- Ideal for retention, attenuation or infiltration applications with a suitable geomembrane or geotextile
- Designed for trafficked and loaded conditions
- BBA approved
- Visual and maintenance access can be achieved when used in conjunction with Polystorm Access & Inspect
- Allow flexibility of shape – ideal for shallow excavation systems, narrow strips or use in restricted areas
- Can be used as part of a value engineered hybrid system with Polystorm-R, Polystorm Lite & Polystorm Xtra
- Integrated inlet and outlet
- 3D flow throughout the structure
- 95% void ratio
- Light in weight yet robust – excellent Health & Safety and installation benefits
- 100% recyclable
- 50 years creep limited life expectancy

## Technical Support

Detailed guidance and assistance is available.

For further information, please contact our Technical Team on **+44 (0) 1509 615100** or email [civils@polypipe.com](mailto:civils@polypipe.com) or visit [www.polypipe.com/civils-technical-hub](http://www.polypipe.com/civils-technical-hub)

ELEMENT	VALUE
<b>PHYSICAL PROPERTIES</b>	
Length	1m
Width	0.5m
Depth	0.4m
Total volume	0.2m <sup>3</sup>
Unit weight	9kg
Unit storage volume	0.19m <sup>3</sup> (190 litres)
Void ratio	95%
<b>SHORT TERM COMPRESSIVE STRENGTH</b>	
Vertical	Maximum 440kN/m <sup>2</sup> *
Lateral	Maximum 63kN/m <sup>2</sup> *
<b>SHORT TERM DEFLECTION</b>	
Vertical	83kN/m <sup>2</sup> per mm
Lateral	4.2kN/m <sup>2</sup> per mm
<b>OTHER PROPERTIES</b>	
Maximum burial depths:	
Light trafficked	3.7m <sup>**</sup>
Non-trafficked	3.8m <sup>**</sup>

Each unit includes 4 Clips and 2 Shear Connectors.

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

\*\* Based on ground conditions being dense sand and gravel with no groundwater present using the calculation methodology detailed within CIRIA C680 (2008). Where ground conditions differ please consult our water management solutions technical department on +44 (0) 1509 615100.



Polystorm Modular Cell 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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