

Product code: PSM5

Polystorm Deep has been designed for use in trafficked applications such as lorry parks and industrial access roads. It has a vertical compressive strength of 61 tonnes/m² and a lateral compressive strength of 14.6 tonnes/m². This allows for deeper burial, and consequently higher volumes of water capture and storage. It can be buried deeper than any other Polystorm cell and can be value engineered as part of a hybrid system.



Applications

The Polystorm Deep modular cells are combined to form a structure that receives rainwater collected from roofs or 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

- Vertical compressive strength of 61 tonnes/m² and highest lateral compressive strength of any Polystorm unit
- Ideal for retention, attenuation and infiltration applications with a suitable geomembrane or geotextile
- Designed for trafficked conditions which require deep burial depths
- Allows flexibility of shape – ideal for narrow strips or use in restricted areas
- Can be used as part of a value engineered hybrid system in trafficked applications with Polystorm-R and Polystorm Xtra
- Can be used as part of a value engineered hybrid system for non-trafficked applications with Polystorm Lite and Polystorm-R
- Undergone testing in accordance to BBA certification
- 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
- Manufactured from over 82% recycled material

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 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	11kg
Unit storage volume	0.19m ³ (190 litres)
Void ratio	95%
SHORT TERM COMPRESSIVE STRENGTH	
Vertical	Maximum 610kN/m ² *
Lateral	Maximum 146kN/m ² *
SHORT TERM DEFLECTION	
Vertical	60kN/m ² per mm
Lateral	10.1kN/m ² per mm
OTHER PROPERTIES	
Maximum burial depths:	
Heavy trafficked	7.9m
Light trafficked	8.2m
Non-trafficked	8.4m

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 Deep 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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