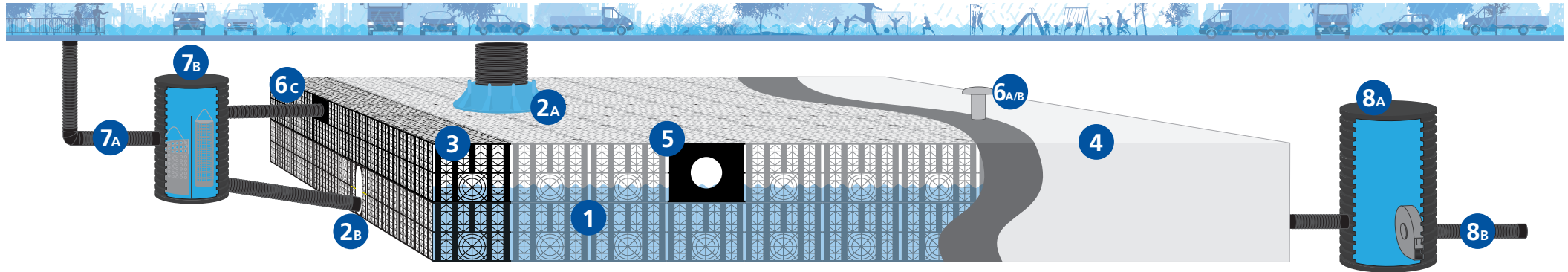
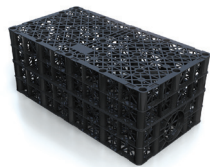


An 8 step guide to a total Polystorm system

Issue 04 | November 2018



1 Select modular cell

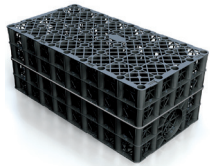


Polystorm Lite

Product code: PSM2
Vertical compressive strength:
20 tonne/m²

Landscaped/pedestrian

Polystorm Lite has been specifically designed for non-trafficked, landscaped and pedestrian applications.

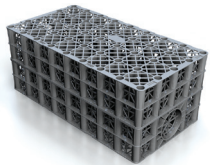


Polystorm-R

Product code: PSM1A
Vertical compressive strength:
61 tonne/m²

Trafficked

The standard Polystorm cell for trafficked and loaded applications at greater depths has the added benefits of a higher recycled material content.

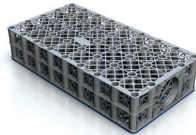


Polystorm

Product code: PSM1
Vertical compressive strength:
44 tonne/m²

Trafficked

The Polystorm cell, made of virgin material, is ideally suited for trafficked and loaded applications at greater depths.



Polystorm Xtra

Product code: PSM3
Vertical compressive strength: 83 tonne/m²

Heavily trafficked or reduced cover

Designed for use in heavily trafficked areas for shallow, non sub-base applications where reduced cover is required.



Polystorm Deep

Product code: PSM5
Vertical compressive strength: 61 tonne/m²

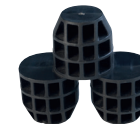
Trafficked, deep and hybrid tanks

Polystorm Deep has been designed for use in trafficked applications such as lorry parks and industrial access roads. It can be buried deeper than any other Polystorm cell and can be value engineered as part of a hybrid system.



Connection accessories

- Clips
Product code: PSMCLIP
- Shear Connectors
Product code: PSMSC

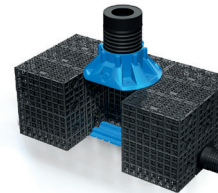


- Brick Bond Connectors
Product code: PSMBBSC

Note: Clips and shear connectors are supplied with all Polystorm units.

2 Select access if maintenance and inspection is required

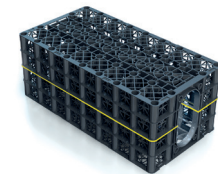
2A



Polystorm Access

Polystorm Access provides a 1m x 0.5m vertical shaft within a Polystorm geocellular structure to enable surface access for remote camera inspection and maintenance activities such as flushing and rodding.

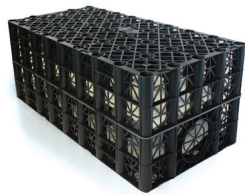
2B



Polystorm Inspect

Product code: PSM4
Polystorm Inspect provides a tunnel along the length of a fully installed Polystorm system to enable horizontal access for inspection and maintenance. It can also be used in conjunction with Polystorm Access.

3 Select if treatment is required



Permavoid Medium Duty with Biomat

Product code: PSM1BM

Comprising of a high strength, low density, oil treating geosynthetic floating mat for use with the Polystorm range of modular geocellular units.

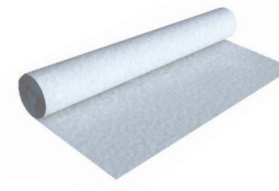
For multi-stage oil interception the Permavoid Medium Duty with Biomat can be used in conjunction with Permatreat or Permachannel (linear treatment) or a pre-fabricated RIDGISTORMSeparate-X4 Chamber (point treatment).

4 Select wrap



Geomembrane for retention and attenuation

An impermeable membrane for encapsulating geocellular structures to form watertight tanks. This is then wrapped in Permatex 300 to protect the geomembrane from puncture.



Permatex 300 for protection

A non-woven protective geotextile used externally to a geomembrane for added protection.



Polystorm Soakaway Geotextiles for infiltration

Available as standard (PVT51000) or heavy duty (PVT52000), non-woven infiltration geotextiles for encapsulating geocellular structures to form soakaway tanks.

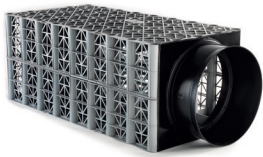


Permafilter Geotextile for treatment and infiltration

This geotextile has been specifically designed to remove hydrocarbon pollution, treating the captured water before infiltrating it into the ground.

5 Pipe Connections

A flange adaptor is attached at both the inlet and outlet points to allow water to enter and exit the tank via connecting pipes.



Polystorm cell with Ridgidrain Flange Connection



Flange Adaptor to EN1401

- Polystorm cells with Flange Connections to Ridgidrain drainage pipes: PSMCRD225 (225mm), PSMCRD300 (300mm)
- Polystorm Inspect cells with Flange Connections to Ridgidrain drainage pipes: PSM4CRD225 (225mm), PSM4CRD300 (300mm)
- Flange Adaptor to EN1401: PSMFA110 (110mm), PSMFA160 (160mm)
- Flange Adaptor to Ridgidrain: PSMFA150 (150mm), PSMFA225 (225mm), PSMFA300 (300mm), PSMFA375 (375mm), PSMFA400 (400mm), PSMFA450 (450mm), PSMFA500 (500mm), PSMFA600 (600mm)

6 Venting

Every attenuation tank requires at least one vent to maximise hydraulic performance and reduce stress on encapsulating geomembranes. This can be done by installing either a Vent Cowl or a connection pipe to vent air directly into an upstream chamber.

6A

Vent Cowl

Product code:

SCV40

To vent air above ground.

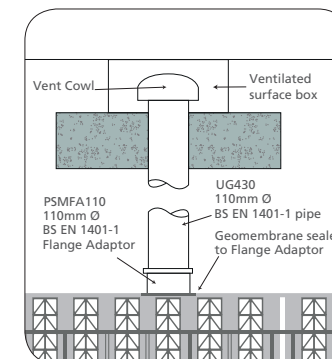


6B

BS EN1401-1 pipe

Product code:

UG430

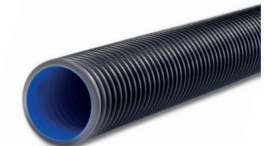


6c

150mm Ridgidrain pipe

Product code: RD150X6PE

For ventilation into the upstream chamber.

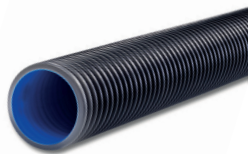


7 Associated upstream products

7A

Ridgidrain

Ridgidrain can be utilised within a Polystorm system by conveying captured surface water to the attenuation or infiltration tank.



7B

Polystorm Catchpits & RIDGISTORMSeparate Chambers

Polystorm Catchpits and RIDGISTORMSeparate Chambers are easily maintainable and prevent the ingress of debris, silt, organic and other particles into the Polystorm structure, extending its useful life.

Polystorm Catchpits

A pre-fabricated 600mm diameter catchpit with three inlet/outlet sizes available in 150mm, 225mm and 300mm.



Silt Traps

320 - 460mm Silt traps are available from the RIDGISTORMSeparate Silt Traps range.



Mini & Basic Catchpits

450 - 3000mm diameter bespoke catchpits are available from the RIDGISTORMSeparate range.



Advanced Catchpits

In addition to silt traps and catchpits, we also offer RIDGISTORMSeparate Advanced Catchpits with additional treatment features.



8 Associated downstream products

8A

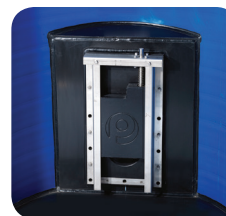
RIDGISTORMCheck

A choice of Vortex or Orifice Plate Flow Control Chambers for precise control of site discharge rates.



RIDGISTORMControl

Pre-fabricated structured wall chambers which feature 'in-line' system components such as penstocks, gate valves or flap valves to control system flows and facilitate maintenance.



Penstock



Gate valve

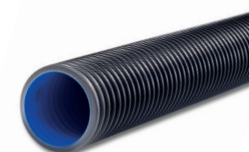


Flap valve

8B

Ridgidrain

Ridgidrain can be utilised to drain away stored water from a Polystorm attenuation tank.



For full datasheets of products in the Polystorm system, please visit our website www.polypipe.com/civils-technical-hub