

Polypipe Supplies Hybrid SUDS Solution for Casting Facility Extension

Polystorm and Polystorm Xtra hybrid structure provides the solution for surface water management requirements.

As part of an extension to the production facility of Williams Lee Ltd, a casting specialist based in Chesterfield, Beighton Construction Ltd, required a sustainable drainage solution to manage surface water run-off from a new car park.

Situated between the new building and a site access road, the SUDS not only had to fit into a tight development footprint of 43 x 7.5 metres, but also required a shallow installation to reduce the amount of cover and to keep installation times to a minimum.

Utilising Polystorm and Polystorm Xtra modular cell systems, Polypipe's water management solutions team designed and supplied a hybrid structure to attenuate surface water run-off from the car park and other hard standing areas.

Over 1,900 cells were installed at a depth of 2 metres, with a 500mm compacted sand and hardcore cover to support the construction of a new car park.

Installing the products at this depth was made possible by the inclusion of Polystorm Xtra on top of the Polystorm cells.

The hybrid installation ensures that the required attenuation capacity could be achieved with a cell-depth of 1 metre, without the need to alter the development footprint or cover depth.

Original project specifications had required a deeper installation to provide adequate cover for the modular cells underneath the car park. However, Polypipe's water management solutions team were able to re-engineer the

solution as their Polystorm range of modular cell systems are the only products which can be integrated as an adaptable hybrid structure. By reducing the depth of installation Polypipe were also able to speed up installation times on the project.

The handling and health and safety benefits of both the Polystorm and Polystorm Xtra cells ensured that the complete structure was installed on-site in only a couple of days.

Andy Holmes, Contracts Director at Beighton Construction commented: "The installation of the modular cell system has been very impressive. The adaptability of the Polypipe products has been of great benefit to us as we've been able to utilise a hybrid solution that met the requirements of the project without any need to change the installation parameters, or alter the footprint of the attenuation structure."

Polystorm and Polystorm Xtra cells weigh just nine and six kilograms respectively, making them light enough to carry and easy to handle. With a void ratio of 95% and 94%, Polystorm and Polystorm Xtra both offer exceptional storage capacity in comparison to traditional methods of attenuation.



Re-engineering solutions to speed up installation

CASE STUDY

Project

Polystorm and Polystorm Xtra hybrid SUDS solution

Client

Williams Lee Ltd

Application

Attenuation

Products

Polystorm
Polystorm Xtra