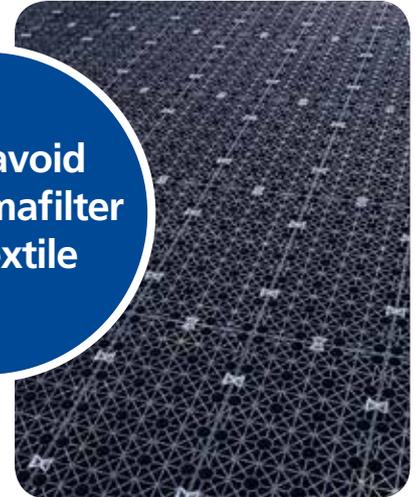


Polypipe's Permavoid proves five star for new hotel

A Permavoid shallow stormwater management system has been installed as part of the construction of Brae Hotel in the remote Shetland Islands.



Permavoid and Permafilter Geotextile



The scheme, designed and supplied by Charcon Hydro Solutions provided a shallow sustainable stormwater management system incorporated within the development, capturing stormwater from the hotel's roofs, access road and car parking areas.

The design incorporated Permachannel and Permaceptor products to discharge into a 500mm deep permeable aggregate storage tank, providing enhanced water storage for heavy and prolonged storm periods. Permavoid check dams have also been incorporated into the design to control the flow of water through the aggregate sub-base.

Treatment of stormwater, through the capture of silts and hydrocarbons, is carried out at the point of entry into the system using the Permavoid Permachannel, Permaceptor

and Permafilter, providing compliant water quality and ease of maintenance.

Rainwater from the hotel roof is also collected and either discharged into the aggregate storage layer using Permavoid diffusers, or discharged directly into a Permavoid Medium Duty attenuation conduit.

Polypipe's Permavoid system ensures that the water discharge into the existing drainage ditch conforms with the Scottish Environment Protection Agency (SEPA) Pollution Prevention Guidelines (PPG 3) for oil separation.

The Permavoid water management system has created a shallow stormwater management system that incorporates water treatment at source whilst allowing the stormwater to flow naturally across the site towards the drainage ditch adjacent to the hotel.

CASE STUDY

Project

Brae Hotel, Shetland

Application

Shallow stormwater management and treatment system

Product

Permavoid
Permaceptor
Permachannel
Permafilter