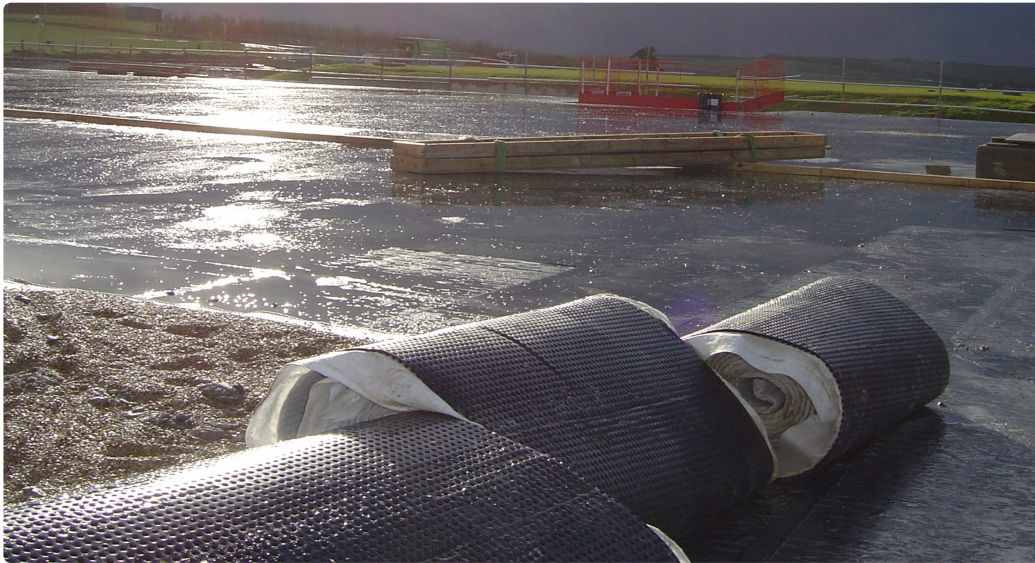


Structural Drainage using Deckdrain



As part of the Didcot water supply system Thames Water have constructed a new twin-celled covered service reservoir at their facility at Hagbourne Hill.

Construction began in 2013 using a concrete structure incorporating precast roof section sealed with a waterproof screed.



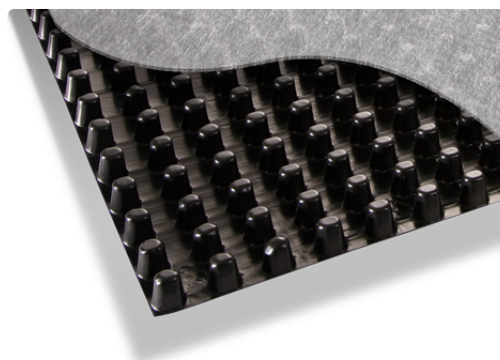
Construction using this method traditionally requires a protection board to be placed against the waterproofing before backfilling with clean no fine drainage stone to allow dissipation of any hydrostatic head against the structure. The drainage stone usually requires importing from an external source, often many miles away from the site.

In this construction the design team and contractors opted to install Deckdrain to form a combined protection and drainage layer against the structure.

The Deckdrain was used on both the walls and the roofs of the reservoir and allowed a significant reduction in both construction time and the volume of materials imported to the site.

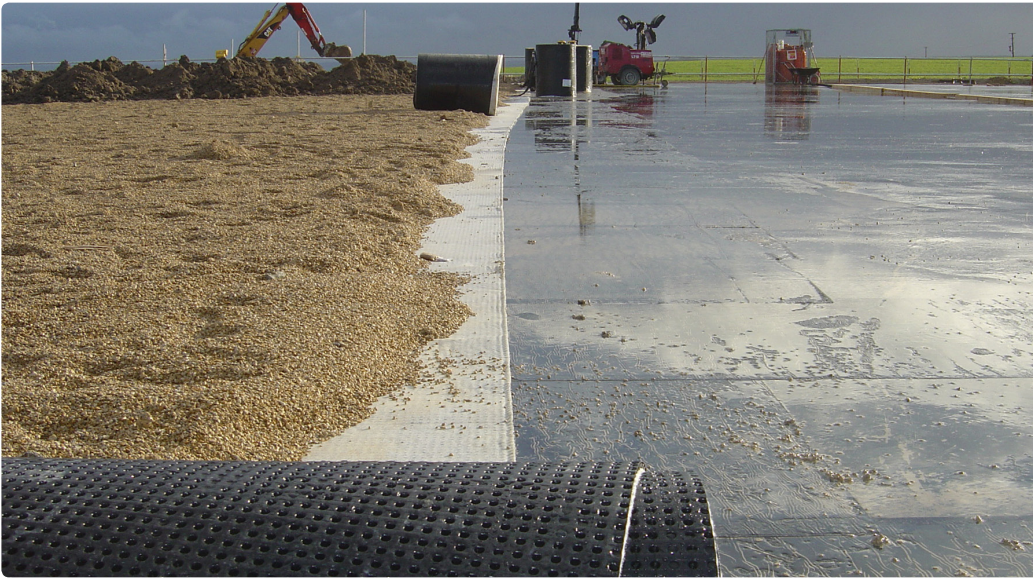
Key Project Information

Project	Hagbourne Hill Service Reservoir
Client	Thames Water
Consultant	Black & Veatch
Products	• 7000m ² Deckdrain 1200S/NW8
Benefits	• Speed of installation • Reduced requirement for imported drainage fill • Factory constant drainage performance



Deckdrain is a high performance drainage system designed to replace stone drainage layers. Deckdrain has been specifically developed to provide high flow capacity and added protection to waterproofing.

It consists a high strength flexible polyethylene cusped core with a non-woven geotextile bonded onto one side. This geotextile filters a



wide range of materials whilst allowing the free ingress of fluids into the core of the geocomposite before draining to a discharge point.

The HDPE core of Deckdrain geocomposite provides a free flowing drainage void within the structure. The studs are designed to support the geotextile which is bonded to the core to ensure that it doesn't deform into the drainage passage under the pressure of the fill material. Unlike in pipes this geocomposite drainage core design allows flow in all directions.

Contact ABG to discuss how Deckdrain can help you deliver a sustainable, cost effective and carbon neutral solution on your project.



About ABG

ABG is a market leader in the design, development and manufacture of high performance geosynthetic systems for use in a wide range of civil engineering, environmental and building applications.

An in-house team of engineers, many of whom are chartered, provide design services for the application of ABG products.

