



## Landfill capping using Pozidrain, Sundon Landfill Site, Bedfordshire

## Landfill Capping

Sundon landfill project represents the largest geosynthetic capping installation undertaken in the UK with over 380,000m<sup>2</sup> of 7mm Pozidrain supplied by ABG and installed by Breheny on behalf of Bedfordshire County Council.



White areas in front of soil backfill show Pozidrain drainage layer. (Photo courtesy of Bedfordshire County Council)

The project design was undertaken by leading consulting engineer White Young Green and utilised Pozidrain drainage geocomposite to provide a combined function of highly efficient landfill cap drainage whilst simultaneously providing protection to the capping geomembrane.

Pozidrain geocomposite drainage layer comprises an impermeable HDPE cusped core on to which is laminated a non woven geotextile filter fabric. Using this construction means that the Pozidrain is permeable on one side only, through the geotextile) which maximises the drainage from the backfill material.

The other side of the Pozidrain core has a flat surface which is placed against the geomembrane. It offers

### Project Information

Client	<b>Bedfordshire County Council</b>
Contractor	<b>Breheny</b>
Designer	<b>White Young Green</b>
Products	<ul style="list-style-type: none"> <li>• <b>Pozidrain 7mm</b></li> </ul>
Benefits	<ul style="list-style-type: none"> <li>• <b>Reduced installation time</b></li> <li>• <b>Increased void space</b></li> <li>• <b>Minimised environmental impact</b></li> </ul>

high puncture resistance thereby providing excellent protection for the geomembrane from puncture and abrasion damage.



Pozidrain positioned over capping geomembrane with soil backfill placed on top.

For more information on Pozidrain visit [www.abgltd.com/products/pozidrain](http://www.abgltd.com/products/pozidrain)

Using Pozidrain geocomposite as the drainage layer also provided the required interface friction within the cap build up to ensure slope stability on the 80m long 1 in 4 slopes.

The use of Pozidrain in this application offered many benefits over 'traditional' construction methods such as using a crushed stone blanket including:

- Greatly reduced construction time - Pozidrain arrives in large wide width rolls that are simply unrolled *in-situ* before the fill is placed.
- Reduced traffic movement - One vehicle load of Pozidrain offers the drainage capacity equivalent to 30 loads of crushed stone.
- Minimised environmental impact - the use of Pozidrain means less quarrying for landfill.
- More void for fill - 7mm Pozidrain offers the same drainage performance as 300mm of crushed stone.

Pozidrain fully supported by ABG's in house technical department who will be happy to provide guidance on its use and applications and advise on which grade



*Pozidrain being unrolled prior to backfill being placed.*

would be appropriate for your specific application.

Contact ABG to explore how Pozidrain could help your client achieve a sustainable, cost-effective and carbon neutral solution.

## About ABG

ABG are a market leading developer of high performance geosynthetic solutions for use in a wide range of civil, environmental and building applications. Established for 25 years and based in the UK ABG pride themselves of delivering outstanding customer service along with innovative solutions.

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