

# Capillary Break

Salt Barrier, Pozibreak,  
Sheik Zayed Grand Mosque, Abu Dhabi, UAE



## Case Study

### Project Description

The Sheikh Zayed Grand Mosque in Abu Dhabi is the largest mosque in the United Arab Emirates and is central to worship in the country. It was originally constructed between 1996 and 2007 and has undergone various enhancements since, including the current ongoing construction of landscaped gardens in 16 hectares of what was previously desert.

### The Challenge

Part of this landscaping project involves the creation of a running track within the gardens. Landscape architects, ICON, were concerned about the rise of saline water through a combination of capillary action and a high water table, fearing that exposure of the surface of the track to the saline water would lead to discolouration.

### The Solution

ABG, working with local distributor WT Burden Middle East, proposed the use of Pozibreak within the landscape build up to form an impermeable barrier to the rise of the saline water whilst allowing collection and drainage of any surface water percolating down through the soils and paving above.

Pozibreak is designed specifically as a drainage void layer installed to protect the imported clean soils from the rise of saline water through capillary action. It comprises a high strength cusped core onto which a geotextile filter fabric is bonded.

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### Project Information

Client	Abu Dhabi Ministry of Public Affairs
Contractor	Citiscap Group
Consultant	I-CON Consulting Engineers
Products	Pozibreak
Quantity	45,250m <sup>2</sup>
Benefits	<ul style="list-style-type: none"><li>• Fast installation over large areas</li><li>• Eliminates drainage stone</li><li>• Reduces excavation requirements</li><li>• Provides a true capillary break against the rise of saline water.</li></ul>



ABG Pozibreak's function under ornamental gardens

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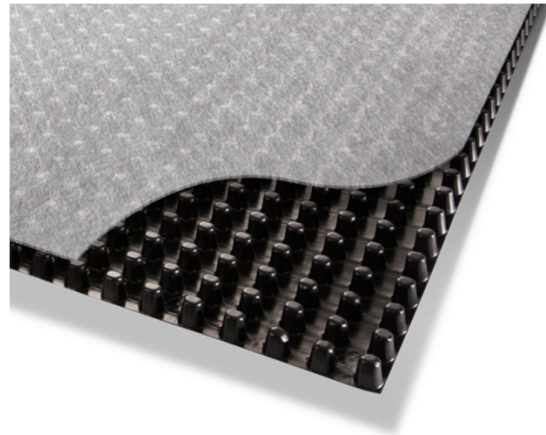


The core offers a dual function forming an impermeable barrier to the capillary rise of saline water and creating a void which provides in-plane flow for collected surface water. The geotextile filter fabric supports the materials above, preventing the void becoming clogged whilst allowing the free flow of surface water into the void.

The Pozibreak was supplied through WT Burden Middle East and installed by main contractor, Citiscape Group, during 2014 with the development completed early 2015.

## The ABG Service

ABG offered assistance with cost comparisons, detailed design calculations, drawings and installation advice.



**ABG's Salt Barrier, Pozibreak**



**ABG Pozibreak rolls wrapped for protection against UV**



**Integrated geotextile flap minimises wastage during installation**

Contact ABG today to discuss your project specific requirements and discover how ABG past experience and innovative products can help on your project.

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