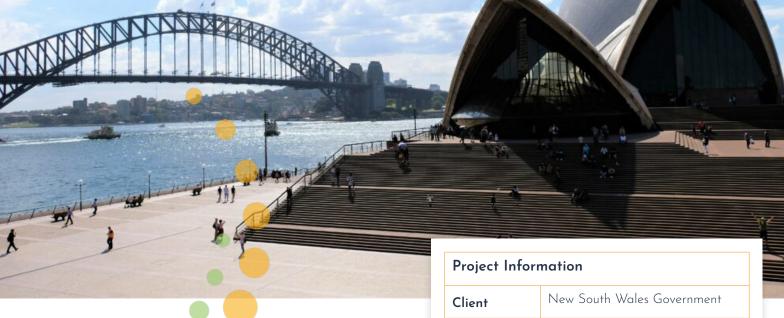
# Structural Drainage

Waterproofing leak detection, Cavidrain S6U, Sydney Opera House





## **Project Description**

Buildings don't come much more iconic or prestigious than the Sydney Opera House, a UNESCO World Heritage site and an architectural masterpiece. A \$9M AUD tender from the Government of New South Wales commissioned the 'Western Waterproofing and Paving' project to upgrade the Opera House's forecourt.

## The Challenge

As part of the re-surfacing project works a comprehensive waterproofing solution was required, with infrastructure contractors Seymour Whyte appointed to implement the design. The Sydney Opera House's cultural significance and importance as one of the leading visitor attractions in Australia meant it was crucial to find a solution that was fast and easy to install, whilst delivering superior drainage.

Project Information	
Client	New South Wales Government
Contractor	Seymour Whyte
Product	ABG Cavidrain S6U Std
Quantity	4,000m²
Benefits	<ul> <li>Easy to install and space saving solution</li> <li>High flow capacity provided in a 6mm layer to channel away excess water</li> <li>Carbon saving alternative to crushed stone</li> </ul>



ABG Cavidrain® S6U Std Geocomposite

## Structural Drainage

Waterproofing leak detection, Cavidrain S6U, Sydney Opera House



### The Solution

ABG's Cavidrain® S6U Std drainage layer, a light-weight and easy to handle 6mm thick preformed cavity drainage system, was specified as the ideal solution to channel away any excess water from the membrane to a subsurface drain. Designed to create a drainage void space on both new and existing below ground structures, Cavidrain offers multiple benefits.

The Cavidrain® S6U Std high-strength core withstands the compressive loads associated with wet concrete placement, and once the concrete is poured, it fills up the cuspated HDPE cavities, making the final load capacity approximately equivalent to that of the concrete slab.

When compared to using traditional crushed stone layers, Cavidrain offers significantly increased drainage performance and a reduced construction depth.

#### The ABG Service

ABG assisted with design details and facilitated a tight construction schedule, with a quick manufacturing turnaround and delivery service.

This in turn delivers large carbon savings, with a reduced number of site vehicle movements and fewer associated transport and removal journeys required. The Sydney Opera House Western Waterproofing and Paving project showcases the efficient performance provided by the Cavidrain® S6U Std system, ensuring the creation of an effective drainage void that is easy to handle, quick to install and sustainable.

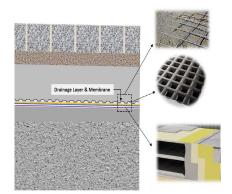




Cavidrain installed onto forecourt substructure



Cavidrain in position beneath concrete formwork Cavidrain S6U Std drainage void for



Cavidrain S6U Std drainage void for relief of water pressure to underground structures

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