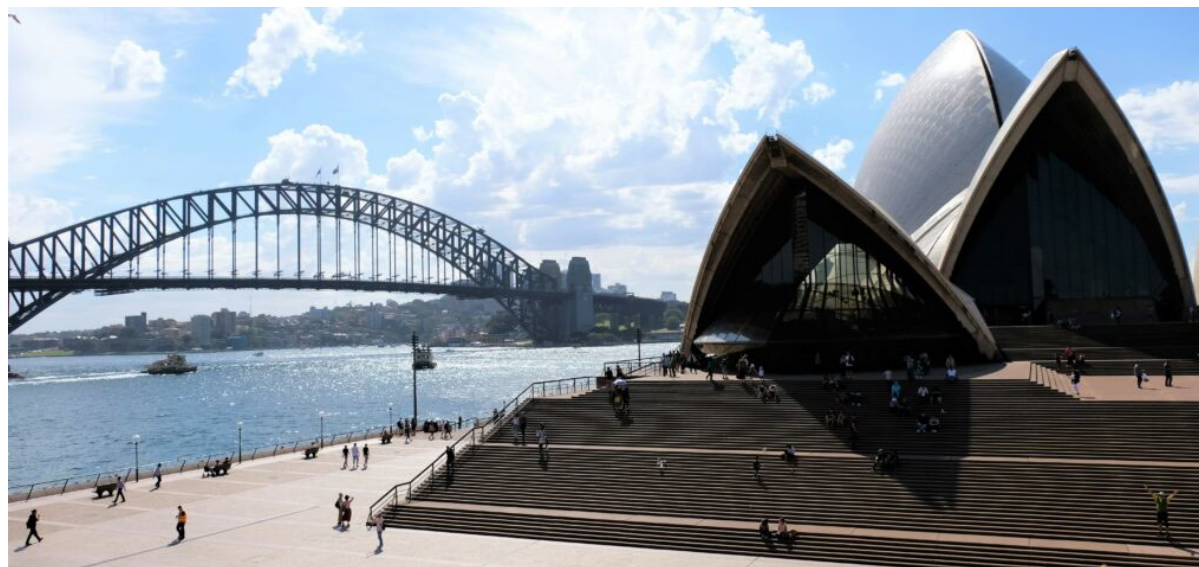


# Structural Drainage

Waterproofing leak detection, Cavidrain S6U Std, Sydney Opera House



## Case Study

### The Project

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.

### Our 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 cusped HDPE cavities, making the final load capacity approximately equivalent to that of the concrete slab.

### Project Information

**Client** New South Wales Government

**Contractor** Seymour Whyte

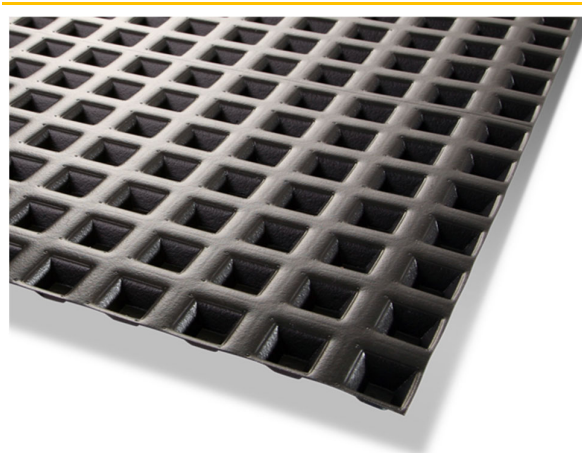
**Distributor** Global Synthetics

**Products** ABG Cavidrain S6U Std

**Quantity** 4,000 m<sup>2</sup>

### Benefits

- Easy to install and space saving solution
- High flow capacity provided in a 6mm layer to channel away excess water
- Carbon saving alternative to crushed stone



**ABG Cavidrain® S6U Std Geocomposite**

# Structural Drainage

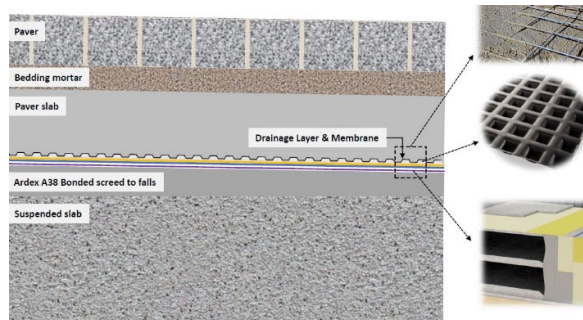
Waterproofing leak detection, Cavidrain S6U Std, Sydney Opera House



## Case Study



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



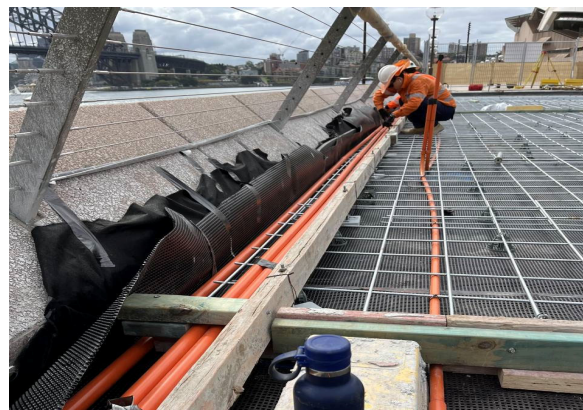
**Cavidrain S6U Std drainage void for relief of water pressure to underground structures**

### The ABG Service

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



**Cavidrain installed onto forecourt substructure**



**Cavidrain in position beneath concrete formwork**

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