

### Location

Terrace Theatre, Bristol Zoo Gardens, Clifton, Bristol, BS8 3HA

### SuDS Used

A 92m<sup>2</sup> green roof was initially fitted in July 2003 with several sedum species, but later was reseeded with various locally-indigenous species.

### How it works

The green roof fits in with the immediate surroundings and provides a contemporary touch while reflecting the ethos of local species conservation. It manages rainfall and also insulates the building.

### Specific details

In 2007 other plant species that are found in the nearby Avon Gorge were planted on the green roof such as the Bristol Onion and Spiked Speedwell. As a result of no watering during an early long, dry spell some species did not survive.

### Design and Construction

Erisco-Bauder designed the green roof system which consists of waterproof liner over plywood, 10mm substrate with 50mm soil, 100mm gravel boundaries with zinc edging, and fall-arrest anchor points.



### Benefits and Achievements

The green roof has served its purpose as a central landmark. The roof sits within a conservation area of the Zoo and provides an area of additional plant biodiversity. It acts as a central landmark that is aesthetically pleasing. The building is well received by the public and was

awarded the Bristol Civic Society Blue Plaque for environmental good practice in 2004.

### Challenges

At the time of completion, the sedum green roof was a ground-breaking innovation. The Zoo promotes conservation of indigenous plants and acts as a platform for bio-diversity. Given the option now, an extensive biodiverse roof which supports particular species indigenous to Bristol would be chosen.

### Lesson learnt

The green roof has had no major issues since its installation in 2003. It has required little maintenance over the past decade. Weeding was reduced to avoid attracting birds which could damage the substrate.



## Team and Details

**Architects** – Hugh Nettlefield,  
Quattro Design

**Green Roof Provider** – Erisco Bauder

**Contractor** – AEJ Williams

**Completion** July 2003

**Size** – Approximately 92m<sup>2</sup>