February 2015

Case Study 02 At-Bristol



Location

The At-Bristol Centre Anchor Road, Harbourside, Bristol, BS1 5DB

SuDS Used

Sedum greenroof

How it works

The At-Bristol green roof was retrofitted onto an existing flat concrete roof. It has a diverse mix of sedum varieties and also various meadow plants and self-seeded grasses.

Specific details

The drainage layer is composed of Lytag. a lightweight ash-based aggregate. The growing medium is a 25mm compost on top of 50mm crushed bricks; below this is a laver of Groden rockwool, a sterile growing medium providing a framework for root development. Groden is able to absorb water and nutrients whilst retaining oxygen for rapid plant growth. There are around five species of sedum on the roof, a species of moss, several different lichens, flowering meadow plants such as dandelions and plantains and a few species of grass. The sedum varieties are either original or have since been planted by the volunteers who are maintaining the roof. The sedum plants have been plug planted.

Design and Construction

The client and architect aimed for the new visitor centre to use sustainable design elements. A green roof was identified to have multiple benefits in meeting these aims.

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Benefits and Achievements

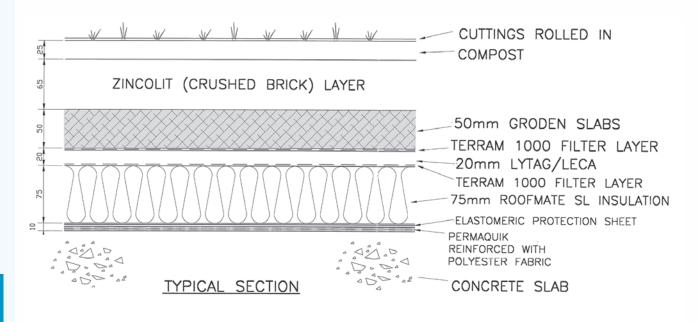
The roof provides attractive scenery for the conference facilities, has good thermal insulating properties and brings greater biodiversity into an area of the city centre. The roof provides an opportunity for the local community to carry out gardening, which has ensured the appearance of the green roof.

Challenges

The roof can become colonised with grassy tussocks and unwanted species which out-compete the other, less aggressive, varieties.

Maintenance

Initially maintenance was carried out periodically at the cost of approximately £3000 a year. However, after a period of limited maintenance due to cost saving, volunteers from the local community now maintain the roof, re-planting different varieties of sedum and weeding. They spend between two and eight hours a week, from March to September and check it periodically through the winter. This scheme has proved to be very successful.





Team and Details

Architects – Chris Wilkinson Green roof Provider – Prater Roofing Planting Contractor – Graduate Gardeners (near Stroud) Completion 1999