

Case Study 17

The Green House

February 2015

Location

The Green House, Hereford St,
Bedminster, Bristol BS3 4NA

SuDS Used

Turf covered, sloping roof.

How it works

The roof is sited on a single storey, Walter Segal-style timber building designed for the headquarters for the Federation of City Farms. They are an umbrella organisation for city farms and



community gardens in the UK. The roof is slightly sloping with an easterly aspect and has been left to develop in a relatively unmanaged fashion and has been colonised by flowers and wild grasses.

Specific details

It has a butyl rubber liner with a 60 year guarantee. This is covered in a layer of gravel and 130mm of topsoil. The roof was originally intended to have an even coverage of native grasses and wildflowers; in practice, the slope means the upper-end drains far better, whilst the lower-end is damper and dries out less in the summer months. Different plant communities (grasses, vetches, mosses etc.) grow in each of the two zones.

Benefits and Achievements

The Federation of City Farms is an environmental and community-based charity, and believes in promoting good practice by example. The green roof reduces surface water run-off and replaces the green-space of the building's footprint as well as reducing air pollution and improving the building's insulation. The building and roof are good educational tools and promote good practice by being a community focal point.

Challenges

Since its construction in 1997 there have been advances in green roof technology. The client observes that if the building was to be designed today, a sedum roof might be chosen. There is a slight reduction in weight from turf to sedum is minimal however turf roofs are a better ecological choice as they use local species of plants and the growing medium is deeper so there is greater capacity to attenuate runoff.

Lesson learned

There were no specific problems with the roof.

Maintenance

The roof is not watered or mown. The minimal maintenance is undertaken as part of the general site maintenance regime.



Team and Details

Architects – Architype (www.architype.co.uk)

Completion 1997

Size – Approximately 340m²