

Biodiverse Green Roof

Green Roof

Bradford University, Sustainability & Enterprise Centre (SEC), Bradford UK



ABG have helped the design and construction team on Bradford University's Sustainable Enterprise Centre to achieve the world's highest pre-construction BREEAM score of 94.95%, with its biodiverse, green roof installation.

The new build £5.2m SEC comprises a four-storey, 2,000m² building, containing workshops, business units, an open-plan office and a multi-function space, all of which will provide learning facilities and teaching resources aimed at promoting sustainable living. Given the nature of the project it was important from the outset that the building and its construction embraced sustainability from the off.

BREEAM stands for the Building Research Establishment's Environmental Assessment Method. It is an assessment method based on performance to set standards for best practice in

Project information

Client	Bradford University
Main Contractor	GB Building Solutions
Green roof installation	ABG (Geogreen Solutions)
Landscape Architect	Margaret Twigg Landscape Design
Architect	Farrell and Clark
Scope of project	Supply, install and maintain 150m ² biodiverse green roof
Products	<ul style="list-style-type: none">• Roofdrain• Green roof components





sustainable design. Credits are awarded in ten categories and then added together to produce a single overall score which is then given a rating of Unclassified (below 30%), Pass (above 30%), Good (above 45%), Very Good (above 55%), Excellent (above 70%) and Outstanding (above 85%).

Inclusion of a green roof is relevant to BREEAM primarily within the Land Use and Ecology section, although it does also impact directly other considerations including flood risk mitigation and indirectly in thermal comfort, acoustic performance, materials specification, hard landscaping, responsible sourcing of materials, insulation, construction site impact, and waste management.

Biodiverse and Extensive Green Roofs are commonly used to replicate and enhance the number of native or beneficial plant species present on site before the construction process in order to gain credits and a suitably qualified Ecological Consultant is required to oversee the process.

Green roof maintenance or habitat management becomes relevant to BREEAM by the Habitat Management Plan, put in place to

safeguard the enhancement of site ecology and long term impact on biodiversity.

ABG undertook the green roof package as a turnkey solution offering design, installation and on-going maintenance. The roof was installed during a two week period in July 2013 by ABG's in-house installer, Geogreen Solutions.

The green roof installation comprised a biodiverse finish, including specially designed features to encourage the development of flora and fauna on the roofing area. Lightweight growing media was used to minimise the roof loadings whilst providing a nutritionally rich base for the specially selected vegetation. Beneath this surface finish Roofdrain drainage composite was used to create a free-draining void that also allows for the storage of collected rainwater to irrigate the vegetation during dry periods.

The biodiverse green roof on this project high-lighted how ABG's in-house technical expertise and on-site installation experience can provide the client with a solution that maximises the potential BREEAM rating in relation to the green roof element of the building.

About ABG

ABG are a market leader in the development of high performance geosynthetic systems for use in the built environment. Established over 25 years ago and based in the UK, in the heart of the Yorkshire pennines, ABG have built a reputation for delivering innovative system led solutions combined with technical support and outstanding customer service. Contact ABG today to discuss your project specific requirements and discover how ABG knowledge and products can help on your project.

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