Green Roof

Biodiverse, Regent Street, Piccadilly, London, UK





Project Description

Part of The Crown Estate's £1 billion Regent Street regeneration, the new 46,000 ft² office building has set a new gold standard in the UK for sustainability in a regenerated historic building. 7 Air Street is the first listed building in the UK to receive a BREEAM outstanding rating (94.16%) – the highest award possible from the industry body which judges best practice for sustainability in the built environment. The launch of the green roof marks the first new green space to be delivered by The Crown Estate as part of 'Wild West End', a partnership between London property owners to promote ecology.

The Challenge

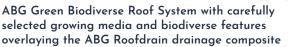
The Green Roof Consultancy's Ecology Report looked to the provision of a green biodiverse roof to address the need to encourage additional species. This achieves an extra credit in category LEO4 (Enhancing site Ecology) of the BREEAM Assessment. In order to maximise the local flora and fauna of the roof it was necessary to create as many biodiverse areas as possible, encouraging nature to make its home in specially designed areas. The PV arrays on the roof left limited space for the biodiverse roof and needed to be designed creatively in order to maximise the potential for the biodiverse areas and the BREEAM assessment criteria.

The Solution

The ABG Green Biodiverse Roof System included a mixture of plug-planted sedum, sedum cuttingsand seeded annual and perennial wildflowers, fitted around the PV arrays and other special features to encourage birds, bats, invertebrates and other wildlife.

Client	The Crown Estate
Contractor	Cawston Specialist Roofing / Geogreen
Architect	Barr Gazetas Architects
Product	Green Biodiverse Roof
Quantity	200m ²
Benefits	 Encourages biodiversity Lightweight and versatile system Helps to insulate the building Planting areas to absorb CO₂





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The Solution

ABG worked closely with the landscape architect to create a system to meet the stringent criteria. The roof installation comprised a wildlife pond planted with native marginal plants, a native wildflower area, matrixes of sedums, grasses and herbs, insect hibernaculas. Also included were bird feeder tables, pebble areas and coiled hemp rope, specially designed features to encourage the development of flora and fauna on the roofing area. A lightweight ABG Biodiverse Growing Media was used to minimise the roof loadings whilst providing a nutritionally rich base for the specially selected vegetation. Beneath this surface finish, ABG Roofdrain drainage and attenuation geocomposite was used to create a free-draining void that also allowed for the storage of collected rainwater to irrigate the vegetation during dry periods.

The ABG Service

We pride ourselves in our high level of knowledge and expertise when designing and installing green biodiverse roofs. Specialist products in bespoke sizes had to be designed to suit this site.



The versatile ABG Roofdrain geocomposite was fitted around footings of the PV arrays to form a continuous drainage layer



Jon Snow (C4 News) and Alison Nimmo, (CEO of The Crown Estate) launch "The Wild West End" project



Nesting sites for birds and insects as part of the biodiverse design. (e.g. hibernaculum above)