

## 5 & 6 ST JAMES'S SQUARE, SIR ROBERT McALPINE



### BIODIVERSITY ENHANCEMENT OVERVIEW

The project comprised high quality new build offices finished to Category A, thirteen fully fitted out residential units, below ground car parking, a gallery, and the refurbishment of a Grade II\* Listed building to provide office accommodation.

There were the following sustainability assessments:

- LEED Core and Shell (v3) – to achieve the contractual requirement of a Platinum rating
- BREEAM Offices (2008) to achieve the contractual requirement of an Excellent rating
- Code for Sustainable Homes (May 2008) to achieve the contractual requirement of Level 3
- Sir Robert McAlpine Ltd's Corporate Sustainability Strategy targets
- Codes of Practice from Local Authorities
- Considerate Constructors Scheme

The project team's priority was to ensure the BREEAM, LEED and CfSH requirements were achieved. Therefore a significant amount of effort was put into ensuring any design changes did not impact on the minimum area or species number. Workshops were held which resulted in the team going beyond the minimum requirements of the environmental assessments by:

- reducing the number (but not the kWp output) of PVs,
- reducing the space that the PV ballast system used
- changing the walkway system from paving slabs to geogrid, which would allow plants to grow through, while maintaining health and safety requirements.

These design changes resulted in the biodiverse roof area increasing from 638m<sup>2</sup> (minimum to achieve the external environmental assessments) to 825m<sup>2</sup> with no cost implication.

### Fact box

**Company name:**  
Sir Robert McAlpine

**Project name:**  
5&6 St James's Square

**Location:**  
London

**Biodiversity enhancement:**  
Biodiverse roof

**Size:**  
825 m<sup>2</sup>

**Cost:**  
No cost implication

**Tips:**

- Start the process early.
- Engage early with the biodiverse roofing contractor.
- Include biodiversity as an agenda item on the design team meetings

**Year completed:**  
2014

### Categories:

- Large scale permanent
- Small scale permanent
- Most innovative

## BIODIVERSITY ENHANCEMENT OVERVIEW (*cont.*)

As the roofing contractor used a Sika liquid plastic system they were significantly more competitive than if a system using Asphalte / Permaquick had been used, and their biodiverse roof actually cost less than the standard pavior system build up. The geo grid cost was offset by the saving on the paviors, which gave us additional planting area, and the design we produced with planting below the PV cells had negligible cost as it was just seed added.

Pictures of the biodiverse roof



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