



## Arup Campus - a contemporary and sustainable working environment

Arup

### Overview

The brief for the new Arup regional office called for a comfortable, energy efficient and cost efficient workplace for over 600 people. Key principles of the design were to create a:

- Spatial organisation that is appropriate for the Arup group work style
- Stimulating and healthy environment
- Flexible and commercially viable building

### Sustainable Design

Phase 1 of the Arup Campus consisted of two long workplace pavilions sited to relate to the contours of the land with communal facilities located on a central spine. Phase II extended this with a further two storey pavilion, new reception area and two new courtyard spaces. The workplace pavilions were designed to include:

- Generous ceiling heights and roof pods for natural ventilation and maximised daylight
- Occupant control
- Excellent air-tightness
- Exposed thermal mass for passive cooling
- Visual and direct links between floors and with the surrounding landscape
- Internal spatial flexibility

### Lighting & Ventilation

Key features of the design include:

- Integration of daylighting and artificial lighting for high quality, efficient low energy
- Advanced natural ventilation allows 24 glass-to-glass
- Roof pods integrate daylighting and natural ventilation, harnessing the wind and sun
- Orientation-specific facades for solar gain, daylight optimisation and views

Artificial lighting is controlled by the building management system. The light fittings were co-designed by Arup Associates to incorporate acoustic absorption to attain good room acoustics despite the exposed concrete soffits.

### Performance Monitoring

Various modelling tools were used during the design process to ensure comfort and low energy use in the building. Post occupancy evaluation and monitoring of conditions have been carried out completing the feedback loop. Thermal mass performance and internal conditions are logged, with external weather conditions, to validate predictive analysis.

### Environmentally Responsible

The building features the use of natural, low embodied energy construction materials, and the expressive roof pods that ventilate the deep office plate and create a distinctive silhouette.

Contact details for further information: Sean Macintosh, Arup Associates  
T: +44 (0)20 7755 4192  
E: sean.macintosh@arup.com