## Plant Growth Facility

Client: University of Cambridge

Size: 850m² Value: £4.1m

Status: completed 2008

Located in the University Botanic Garden, this awardwinning state-of-the-art research facility was designed by **rhp** for the Cambridge University Department of Plant Sciences.

Laminated timber arches support the building's stainless steel-clad roof and curved timber walls, enclosing two large, column-free halls that house a series of climate-controlled chambers. The building function requires few day-lit spaces, and keen to avoid a windowless 'blank box', we brought the curved roof to the ground so that the building appears to nest within the garden landscape.

By exposing the timber structure we created a vigorous and rhythmical exterior form. Trellis grids, colonised

by climbing plants, veil the north and south facades, hinting at the function of the building and helping to anchor it within the landscape. An external retaining wall constructed from recycled car tyres adds further textural depth and interest.

Our decision to use a timber structure was informed by the Building Research Establishment Environmental Assessment Method (BREEAM), and we specified timber harvested from sustainably managed forests. Other environmental measures include the use of ground granulated blast furnace slag in the foundations and floor slabs to reduce cement content (a major source of carbon dioxide emissions), and levels of insulation and air-tightness well in excess of building regulation requirements.





