

Description

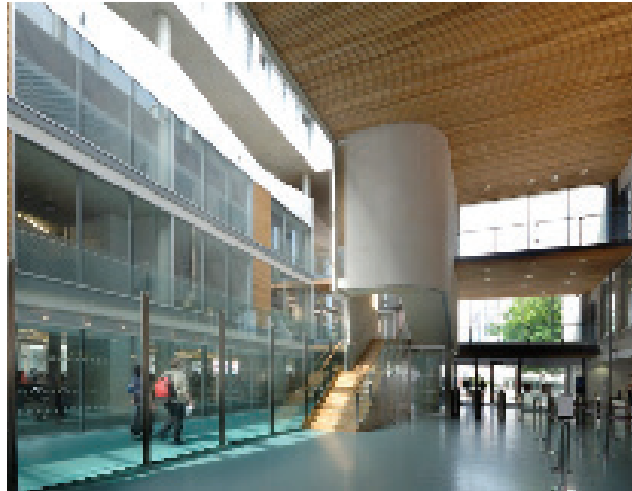
- ◆ A new £11m extension and refurbishment of the mechanical and electrical services to the 10,000 sqm library for Portsmouth University completed in 2007
- ◆ The extension has various noteworthy features; the spacious atrium linking to the older parts of the library, the double height second floor, the sedum roof on the single-storey pooled teaching space and 'The Street' – a corridor running right through the building with glass on both sides.
- ◆ The systems provides facilities for an astronomical observatory, recovery ventilation systems, compressed air distribution, air source heat pumps, and a high quality reception space
- ◆ Designed to achieve a BREEAM rating of Very Good, the building minimises energy use and its environmental impact

Involvement

- ◆ Condition survey, detailed design and specification of the building engineering mechanical & electrical services
- ◆ Heating utilising underfloor heating, suspended on the floor posts and fresh air provided through the floor plenum. Additional passive ventilation achieved by user controlled dampers ducted to the external façade
- ◆ All lighting was mounted directly to the RC frame with conduits in pre-cast walls. Displacement floor ventilation used throughout
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Benefits Delivered

- ◆ Use of materials to help maintain stable internal temperatures without the need for air conditioning, collecting rainwater to flush toilets and ensuring good design maximising the opportunities for good daylight whilst minimising solar gain
- ◆ User comfort was paramount in the design to ensure the building is a healthy place to study and work avoiding the stuffiness often associated with libraries



£11m refurbishment of the mechanical and electrical services to the 10,000 sq m library. Comprising a high mass structure with services provided to suspended floors throughout.