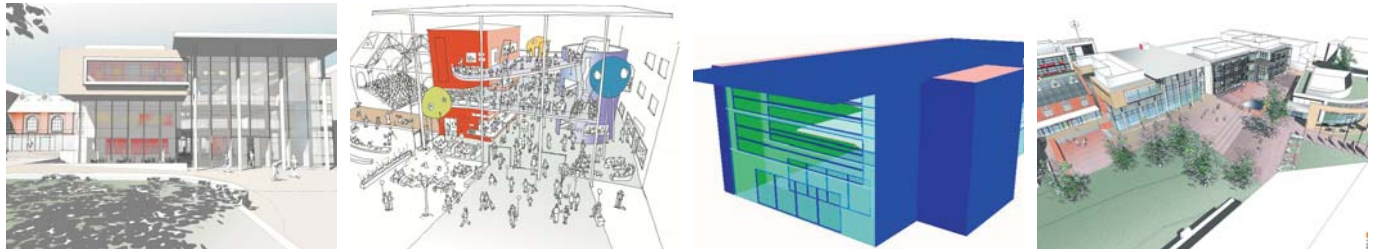


EDP Ltd.

## 'Southampton City College Redevelopment'

Redevelopment of Southampton City College to include two new curriculum buildings, a hub building incorporating a theatre and media studies, and refurbishment of existing buildings



Redevelopment of Southampton City College

### Notable Features

To meet the needs of a vocational Further Education college for the twenty first century, delivering both refurbishment and new build sustainably whilst providing demonstration of low carbon technology and teaching resources.

To this end the project includes a centralised site heating system that incorporates Combined Heat and Power (CHP) generation designed to be incorporated into the Southampton Geothermal District Heating system.

Building fabric, natural ventilation, window and shading design that together reduce energy demand, exceed the Building Regulations requirements and reduce carbon emissions by a further 10%, all part of reducing the Colleges demand for fossil fuels and an estimated reduction of 120 tonnes of CO<sub>2</sub> emissions in a year.

Renewable energy in the form of both PV cells and wind turbines incorporated to provide a teaching resource.

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### Setting the scene

The development commenced with a review of national guidelines on sustainability, including those published by defra. A sustainability Action Plan was drawn – up in partnership with the funders, the College staff and the project team to guide and monitor the broad requirements of sustainable development. An early decision was made by the College to pursue a BREEAM Assessment and to obtain an 'Excellent' rating, and this aim is well on the way to delivery.

The involvement of stakeholders at the earliest stage of development has ensured involvement by the local community and the College staff and students. In particular the work in thermal modelling, lighting modelling and design development are being made available to the students. Elements of the building structure, construction methods and building services systems are being exposed as a teaching resource.

### Beating the odds

The provision of low energy buildings and low carbon technologies has been developed within the funding available to the College. This has been made possible by early work using computer analysis and early decisions targeting the important elements, firstly to reduce building energy use, then to provide low carbon energy sources.

### Reaping the benefits

The College will enjoy improved environmental conditions in buildings which require less energy to maintain, meet the educational vision, provide an icon of sustainable design and flexible facilities for the twenty first century.