KEY FACTS

CLIENT
JOSEPH LECKIE ACADEMY

YEAR COMPLETED
2016

ARCHITECT
SEYMOUR HARRIS ARCHITECTURE

CONSTRUCTION COST
£5M

PROJECT DESCRIPTION

The project involves the creation of a new three storey standalone ICT rich teaching block on the existing Joseph Leckie Academy campus. The project was delivered using BIM technology and methodology which has helped us to quickly understand how our building services design would interact and coordinate with other aspects of the building fabric. This technology enabled us to fast-track development of the scheme proposals through the planning and tender process, with significant benefit to the Client's development programme.

The concept design was underpinned by a 'back to basics' approach to devise a solution that could utilise passive treatment of the teaching environment throughout most of the year, whilst also making additional provision for more intensive use of ICT equipment in future that could otherwise lead to overheating of the classrooms.

The facade design was optimised to balance heat loss in winter, overheating in summer and the daylight quality within each of the classrooms to create a comfortable environment.

SERVICES PROVIDED

Building Information Modelling (BIM)
Building Physics and Facade Engineering
Electrical Engineering
Carbon Management, Energy and Sustainability
Lighting Design
Mechanical Engineering
Thermal Modelling
Utilities
Daylight, Sunlight and Overshadowing
JOSEPH LECKIE ACADEMY PHASE 1

KEY CHALLENGES & SOLUTIONS

Delivering the project in a Building Information Management (BIM) environment has proved to be a significant benefit. However, because the team were using different software packages this presented a real challenge and a steep learning curve, particularly in the use and understanding of open data standards to allow all members of the design team to exchange information.

Effective collaboration with the Client and the design team, and application of BWB’s expertise in applying complex thermal analysis as a standard component of our design service rather than as an ‘added optional extra’, resulted in the project being delivered on time and on budget.

KEY CONTACTS

David Stairmand
MOB: 07921 215055