



Newcastle Central Mosque



New mosque and community building designed to Passivhaus standards

£18M
PROJECT DELIVERED



Description

- SDS were responsible for the electrical design element of the Building Integrated PV (BIPV) façade, co-ordinating with specialist glazing manufacturer and design team
- The building currently achieves an EPC B rating with a score of 28 and EPC A rated building with PV panels installed
- The building is designed with flexibility in mind to accommodate the different usage of the various spaces
- A significant part of the project involved a number of energy studies to reduce the overall carbon footprint
- The building performance was benchmarked against good practice energy data and further assessed using thermal modelling techniques.

Involvement

- SDS were responsible for the full mechanical and electrical design on the project, including the undertaking of all thermal modelling and Part L compliance calculations.

Benefits Delivered

- The building uses super insulated well sealed construction methods, using ventilation heat recovery systems for ventilation and heating. Energy usage is reduced at source through a series of techniques to avoid over-sizing of plant and equipment
- The result was a high performing building, way in excess of industry standard best practice data. We also produced low and zero carbon reports for the project as part of the overall deliverables.