

Liverpool John Moores University

Overview and Challenge

Liverpool John Moores University's £4.2m STEM 2 (science, technology, engineering and maths) project stipulated the refurbishment of the first and fourth floor laboratories of the James Parsons Building, together totaling an area of 14,000 sq ft.

A major goal of the project was to help the university to meet the Higher Education Funding Council for England's (HEFCE) Carbon Reduction Strategy targets of a 43% reduction in emissions by 2020 and an 83% reduction by 2050 (both against a 2005 baseline).

The refurbishment was required to take place in a live environment.

Solution

One of the UK's leading laboratory refurbishment companies, Sanber Ltd, was commissioned to design and install 41 new fume cupboards, energy-efficient variable airflow volume (VAV) controls, fume extract ductwork and fans.

Sanber in turn commissioned its airflow controller partner, Temperature Electronics Ltd (TEL) to supply 41 energy-efficient AFA1000 VAV controllers which automatically adjust airflow according to laboratory demand. The VAV systems were linked to the supply air and building management system (BMS).



Benefits

The 23-week STEM 2 project was completed in September 2016, with TEL working closely with Sanber to enable it to achieve its tight 10 week target for the replacement of the old fume cupboard system with a new, more energy-efficient one.

Said the university:

"Liverpool John Moores is committed to the pursuit of HEFCE's sustainability targets, and as such, to ensuring that all our refurbishment schemes contain the most energy-efficient equipment options."

World leaders in airflow controls and monitors