

Taunton & Somerset NHS Project

New External Data Centre

Client Brief:

To design and build an external modular data centre including total infrastructure. A key factor in this project was the importance of energy efficiency and reducing the NHS Trust's carbon footprint. The project comprised an external build room, switch and UPS room and main data centre for 20 cabinets, all cold aisle contained. The infrastructure includes: UPS systems, raised access flooring, fire suppression and detection, structured cabling, power supply infrastructure, power monitoring, energy efficient air conditioning and cold aisle containment. The exterior is wood cladding, sympathetic to the surrounds.

Timescale:

A sixteen week programme was completed in November 2012.

Logistical Challenges:

Secure IT Environments worked in conjunction with KIER Construction - principle contractor responsible for a major expansion project for the hospital. Given the size of the overall project, a seamless operation with the principle contractor was essential as other major construction was ongoing throughout the data centre build.

The project achieved a PUE of 1.18 - highly efficient, due to the use of Denco energy efficient DX air-conditioning units and 360 KVA UPS's. The data centre has a 600mm raise floor, which is particularly high but allows greater airflow - another contributor to improving efficiency. The build was also in close proximity to other hospital buildings.

Room Size:

128m²

