

# CASE STUDY SOUTH WEST ENERGY CENTRE

# TOTUS



**Sector:** Education

**Client:** South Devon College

**Main Contractor:** Kier Construction

**Contract Value:** £960k

Totus were employed to carry out the design and installation of the Mechanical & Electrical services in a new further education teaching facility with its intended use primarily for renewable technologies and sustainable building methods. As such, the new building has been constructed to exemplify best practice in this field, with renewable and low carbon technologies at the forefront of design and client requirements.

The building benefits from a glass fronted façade allowing natural sunlight into the space, which, in conjunction with the daylight saving lighting controls, improves the energy efficiency of the building. Other energy efficient measures employed were the installation of solar thermal arrays for the hot water system, photovoltaic panels and a rainwater recovery system which supplies the water to flush all WC's, and it will also supplement the irrigation system for the Sedum "green" roof.

Finally within the plantroom which doubles up as a teaching space a 80Kw Biomass Boiler and 10 tonne capacity wood pellet store has been installed to provide the LTHW to the heating system and a South facing solar wall with heat absorbing materials to pre-heat fresh air used for ventilation of the Innovation Suite.



This project was recognised in the Michelmores and Western Morning News Property Awards 2014 and also achieved a **BREEAM rating 'Excellent'**.

## Services Provided:

- Heating System
- BMS Controls
- Solar Thermal Hot Water System
- Supply & Extract Ventilation System
- Solar PV
- Heat rejection system for the training hall gas fired boilers
- Air Conditioning
- Harvested rainwater recovery system