

References

Dudley College, Dudley



Uponor involvement



TABS

Dudley College, Dudley

The Advance II project is part of a transformation programme at Dudley College and the fifth new teaching facility to be constructed as part of the 'Dudley Learning Quarter' campus development.

Project Facts:

Location

Dudley, United Kingdom

Completion

2017

Building Type

Sports facilities

Project Type

New building

Partners

Client

Dudley College

Contractor

Bowman and Kirkland

M&E contractor

Derry Building Services

Architects

Metz Architect – James Blood & Joe

Marlow

The £12 million scheme is a teaching centre for advanced construction methods and technologies. It is the first UK project to be built using the IPI (integrated project insurance) procurement and delivery model, which put collaboration at the heart of the design and construction process. The brief was to create a building that is as operationally efficient as possible for the available budget, using forward-focused technologies that complement its purpose as a centre of learning for tomorrow's construction professionals.

Uponor's Involvement

Uponor worked closely with the project team and the college's estates team to ensure that the TABS (Thermally Active Building System) was embedded in the design and the BIM level 2 model. The Uponor team arranged a site visit to the TABS installation at Manchester Metropolitan University to demonstrate the benefits of the technology.

Thermal modelling data was used to estimate the heating and cooling requirements for the 3,500m² building to ensure correct specification and the TABS system has been specified to complement the highly insulated building envelope, with external weather stations controlling the TABS via actuators.

The Benefits

The Uponor TABS installation has enabled all heating, cooling and domestic hot water to be powered by just two domestic boilers (with a third for standby) and avoided the need for any additional heating, air conditioning or mechanical ventilation. By working with the efficient building envelope, the system delivers an ambient indoor temperature all year round with minor adjustments of +/- 4-5 degrees, and weather station controls provide a true, fit and forget, maintenance free solution.

