uponor

Kingston University, South West London



➤ Uponor supplies heating and cooling solutions for the Kingston University Estates

The Kingston University Estates Team required a heating and cooling solution for its new town house development, which could fulfil the following requirements: reduce energy loads, maintenance and carbon emissions. What's more it was imperative that a long term financial benefit could be achieved.

The town house development, which will form a key component of the University's Penrhyn Road campus, will be completed in time for the 2019/20 academic year. The campus will also feature a flexible teaching space, cafeteria and landscaping.

Key points

- A 9,027m² town house development within Kingston University London campus
- Early engagement enabled the use of TABS within the building
- A low cost and low energy solution was delivered by Uponor

Products and services supplied

Underfloor heating / Thermal Active
 Building Systems (TABS) – 9,027m2 / State
 heat transfer stimulation

Key parties

Contractor : Willmott Dixon

Client : Kingston University Estates Team

> Uponor's involvement

Uponor engaged with the M&E consultants to develop the design of a high efficiency heating and cooling solution for the internal spaces of the building, including underfloor heating in the ground floor and TABS in the upper levels. Uponor used a steady state heat transfer simulation model to demonstrate the heating and cooling performance of the radiant systems and assist in optimising the indoor climate strategy of the development.

The beauty of Thermally Active Building Systems (TABS) is that it can be embedded (pipes) within the concrete mass of a ceiling in a discrete way, so as not to impact the overall aesthetic appeal. It provides an ambient temperature within the building by heating and cooling the water supplied with minimal energy and is linked to the outdoor climate.

The TABS was installed a year ahead of the completion date and fulfilled the budget and time constraints set out.



Benefits

- TABS will assist Kingston University with achieving its aim of a BREEAM 'Excellent' accreditation
 by reducing overall energy consumption. What's more, it is highly versatile and can be adapted
 according to conventional and renewable energy sources, whilst also taking into consideration
 site dynamics.
- TABS only requires a minimum adjustment in the water temperature of +/-4 or 5°C and works silently in the background (perfect for academic and work environments) as a "fit and forget" solution.

Moving Forward

Uponor is a leading global solutions provider for the delivery of safe drinking water as well as energy efficient heating and cooling systems. Founded over 100 years ago, Uponor remains the industry's market leader, pushing the boundaries of innovation and supplying the highest quality products to the construction industry in the UK and globally. Uponor's products can most commonly be found in the commercial, residential and industrial sectors.

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