References

Manchester Metropolitan University, Manchester



Uponor involvement

TABS

Manchester Metropolitan University, Manchester

The innovative building, incorporates three individual towers and two atria and boasts not only world-class teaching and learning facilities for students, staff and businesses, but also catering and leisure areas for all students, and conference venues which will draw companies and industry associations from across Europe and beyond.

Project Facts:

Location
Manchester, United Kingdom

Completion
2012

Building Type
Sports facilities

Product systems
Radiant Heating & Cooling

Project Type
New building

The solution
The innovative building, which is due to open in 2012, incorporates three individual towers and two atria and will boast, not only world-class teaching and learning facilities
for students, staff and businesses, but also catering and leisure areas for all students, and conference venues which will draw companies and industry associations from across
Europe and beyond.

Designed by award-winning, sustainable design firm, Feilden Clegg Bradley Studios, and built by Sir Robert McAlpine the building will top eight storeys along the Mancunian Way and slope to four at its entrance on Grosvenor Park. It will also have strong green credentials with the use of renewable energy sources, energy efficient heating

and lighting as well as a pioneering chilled concrete slab cooling system (Uponor - Thermally Active Building System TABS).

The building has been certified ‘Excellent’ under the BREEAM environmental assessment scheme. The total cost of the project will be £75 million and is an integral part of theUniversity’s estates investment strategy.

The Benefits
Working alongside precast manufacturer Hanson, the solution that was delivered to the scheme was a pre-cast concrete floor slab system which has a fair faced permanent
formwork concrete soffit with Uponor chilled water pipework embedded beneath the soffit surface. With ground water utilised as a cooling source, a chilled water circuit in turn is passed through the concrete, creating a radiant space cooling system.

Mechanical ventilation is provided to the majority of areas using the raised access floor as a supply plenum. Return air passes into the atrium via cross talk attenuators where
it rises to the air handling plant rooms at roof level for heat recovery. Cooling is provided by a combination of cooled