REHAU CHILLED CEILING
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FIRST UK INSTALLATION IN SIEMENS’ THE CRYSTAL

The Crystal, a Sustainable Cities Initiative by Siemens located in London’s Royal Victoria Docks, is the first building in the UK to use REHAU’s chilled ceiling system.

Two 30m² conference rooms in London’s newest landmark, which also houses the world’s largest exhibition on the future of cities, have been fitted with REHAU’s new high performance chilled ceiling panels to provide efficient and effective localised cooling.

The chilled beams used elsewhere in the 6,300m² building could not be used for the conference rooms where suspended ceilings were required so consultants Arup looked for an alternative solution which offered comparable levels of efficiency.

After a CPD presentation from REHAU, they chose the new high performance chilled ceiling solution which comprises standard gypsum plasterboard panels with grooves milled into them to accommodate loops of pre-integrated 10mm RAUTHERM S PE-Xa pipework.

The panels are pre-assembled with the pipe in loops 45mm apart and come complete with an extensive range of fittings to secure the boards to the suspended ceiling hardware. The pipe tails are simply connected into a manifold system to the supply of chilled water using REHAU’s renowned EVERLOC compression sleeve fittings which guarantees no leaks.

With a cooling capacity of up to 75.5 W/m², the high performance chilled ceiling panels offer a combination of high output and energy efficiency. At the Crystal, they are linked to the supply of chilled water generated by a reversible ground source heat pump with chiller unit attached and operate in line with the BREEAM Outstanding assessment which the building has achieved.

The REHAU chilled ceiling system was installed by M&E contractors Lorne Stewart. Installation was quick and easy thanks to the pre-assembled ceiling element and the predrilled fixing grid. There are also four board sizes available in the system which means it is simply to configure the system to fit the required ceiling space.

Tony Harbour who along with Graham Richardson was responsible for the design of the project within REHAU, said: “Our chilled ceiling system, which is available in standard, high performance and acoustic versions, has already been specified extensively in mainland Europe but this is the first installation in the UK.

“The fact that this is in a building which has been recognised as being a benchmark in sustainable design and construction excellence is particularly pleasing.”

The Crystal is claimed to be one of the world’s greenest buildings. Designed by Wilkinson Eyre Architects, it serves as a conference centre, urban dialogue and platform and technology and innovation centre all in one. It is open to the public with a 2,000m² exhibition space showcasing global best practice in urban planning and design.