

References

Alltours Headquarter



Uponor involvement



Uponor Thermatop M | Heating manifolds

A feel-good climate for everyone

A radiant cooling ceiling from Uponor ensures pleasant temperatures all year round.

The new corporate headquarters of Alltours in Düsseldorf not only scores points for its location - the feel-good factor in the building is also great

Project Facts:

Location

Düsseldorf, Germany

Floor space

13,500 sqm

Completion

2024

Building Type



Product systems



Address

40213 Düsseldorf

Partners

Investor: Alltours Flugreisen GmbH

Architect: HPP Architekten GmbH

Planner: DSTR Plan, Dennis Thamm

Plumber: HEIKA Heizungsbau GmbH

The new corporate headquarters

The new company headquarters of Alltours in Düsseldorf (German travel tour operator) not only scores points for its location - the feel-good factor in the building is also high. A radiant cooling ceiling from Uponor ensures pleasant temperatures all year round.

The largest independent tour operator in Germany, Alltours, is building a new company headquarters in Düsseldorf. In future, 13,500 square meters of office space will provide enough room for around 630 employees. The new building is in a prominent location: the office building is being constructed directly on the banks of the Rhine - opposite the listed Behrensbau building and in the immediate vicinity of the Mannesmann high-rise. The defining design element of the new ten-storey building is a filigree, vertically structured façade structure that continues up to the sloping roof. With its striking but visually calm agency language, the building blends harmoniously into its surroundings. In the middle of the building complex, a connecting atrium is being created, which offers a high quality of stay all year round thanks to its bright and attractive atmosphere. In future, employees will be able to relax on the top floor of the building - on the outdoor terrace, in the chill-out area or in an area with sports and health facilities.

Why cooling?

The basic prerequisite for a high quality of stay is a good building climate - the indoor temperatures should be within the comfort range all year round. When planning the building, it was therefore important to consider not only the heating case, but also the cooling case. This is because the extensive glazing of the façade on the one hand, and the people, lighting and electrical appliances on the other, increase the external and internal cooling load of the new building. Their heat input causes the temperature in the building to rise, and even external shading cannot prevent this sufficiently. In the Central European climate zone - including Düsseldorf - it is to be expected that the room temperature in summer often rises above an operative room temperature of 26°C and thus exceeds the comfort limit. Added to this is the influence of the insulated building envelope: while the insulation ensures that less heat escapes in winter as desired, it naturally also does this in summer. This means that once rooms have heated up, they no longer cool down so quickly. "Climate change has of course also arrived in Düsseldorf. Our aim was therefore to create a pleasant working environment for Alltours employees in the truest sense of the word. That's why planning a building cooling system was essential," concludes Dennis Thamm, specialist planner at DSTR Plan, who is responsible for planning and implementing the technical building services (TGA LPH 1-8) in the project.

Never break a sweat

Radiant cooling ceilings offer a particularly pleasant type of cooling. Thanks to relatively high flow temperatures, they create passive, silent cooling in an energy-efficient way and keep the temperature in the comfort zone - without draughts. Uponor's seamless, modular Thermatop M radiant cooling ceiling was chosen, which also offers a wide range of design and application options: The design of the water-based system is flexible, adapts to difficult room geometries and offers freedom in room design. Its high active surface area and coordinated control components make planning the chilled ceiling particularly easy. The system also offers advantages in terms of installation: the installer attaches the Thermatop M heating and cooling elements to conventional substructures, such as those used in drywall construction. The individual elements consist of prefabricated meanders made of aluminum composite pipe, which are fixed with fastening rails. There are spring clips on the fastening rails that enable quick and tool-free installation on the CD profiles of the ceiling substructure without having to move the on-site substructure - the installer simply hangs the elements between the CD profiles.

Another major advantage of the system is the clear separation of trades for drywall and acoustic construction: after installation, the drywall installer covers the ceiling in the same way as with ceilings that are constructed without cooling.

Dennis Thamm sums up the benefits: "Uponor Thermatop M offers good results in every respect, is easy to install and is also good value for money. That's why it was our first choice for the new alltours headquarters." In future, the chilled ceiling will provide thermal comfort in the offices - covering an area of 6,000 square meters. "The employees can decide for themselves room by room whether and how to heat and cool. This increases employee satisfaction," Thamm is convinced.

Eliminate noise as a disruptive factor

A pleasant working environment also requires the right noise level in the office. The design of the ceiling has a significant influence on this. This is because the plasterboard panels chosen for the ceiling cladding influence the acoustics and room climate: perforated panels absorb sound and thermal panels have an effect on cooling performance. Different perforation patterns, for example, lead to different sound absorption behavior: The highest levels of sound absorption are achieved by boards with a perforation ratio of between 10 and 20 percent. These and similar perforated panels from Knauf, a specialist in drywall construction, flooring, plaster and façades, are compatible with the Thermatop M radiant heating ceiling. However, the sound absorption coefficient of Thermatop M is also particularly high because no heat conducting plates are required. These would otherwise cover the perforations - especially with high heating and cooling loads - and thus prevent the desired sound reduction. With Thermatop M, on the other hand, the sound can penetrate freely into the perforated panel and is not reflected back into the room.

Optimal working conditions on the Rhine

The employees of alltours can look forward to their new offices. "All in all, a place to feel good is being created on Mannesmannufer: It's good to work here, because the needs of the building users are at the forefront everywhere. Above all, the right indoor temperature has a major impact on well-being. I am glad that with Thermatop M we have a solution for the office building that creates an optimal working climate," summarizes Thamm.

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