Références

Old saltwater pool in Reichenhall

Implication d'Uponor

24000

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The newly renovated building complex contains offices and the salt museum. And Uponor radiant heating systems ensure that it all stays at a comfortable temperature.

Connaissance du projet

Location
Bad Reichenhall, Germany

Achèvement des travaux
2010

Type de construction
Bâtiment public

Product systems
Systèmes rayonnants rafraîchissants

Adresse
SÜDSALZ GmbH

Site internet
http://www.alte-saline-bad-reichenhall.de

Type de projet
Renovation

Partenaires

architect
Planungsbüro A. Graßmann GmbH
Salzstraße 68, Mitterfelden 83404
Ainring BAYERN
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The ground-up renovation of this historic building complex involved a number of different challenges. From the planning office in Ainring/Mitterfelden, project manager for the planning, Anton Grassmann, says: “In addition to the requirements of the construction itself, we had to adjust to the requirements for historic buildings, preserve the historic floor coverings and observe the guidelines of the German Energy Conservation Regulation (EnEV).”

The customer wanted a system that was discreet, accessible and cost-effective – and we were able to meet these demands by combining the Minitec surface heating system, Siccus lightweight panels and Tecto pipe positioning panels. “In addition to the benefits offered by the radiant heating systems, the properties of the PE-Xa plastic piping provide other advantages as well. Because this piping can be installed directly in plaster, we were also able to use it for the wall heating system.
This solution fulfils a dual function: It serves as a heat source for maintaining a comfortable room temperature while keeping the building free of frost and thereby protecting the historic value of the property,” explains technical building equipment planner Grassmann.

After installing the radiant heating system, the planner then had to make sure that it was possible to use the historic floor covering. Here, we turned to the Minitec renovation system.

After applying the levelling compound, we were able to install the historic floor covering with no problem at all thanks to the system’s small installation height of 15 mm. And there was another benefit to this system: After just three hours, it was possible to walk on the floor and, just a few days later, we were able to begin heating. This allowed us to avoid unnecessary delays during the renovation phase.
In some parts of the historic buildings, it was not possible to install new screed. However, we still wanted to take advantage of the benefits of economical and accessible underfloor heating system. This made the decision to use Siccus lightweight panels an easy one. This system also offers a low installation height of 50 mm. Thanks to the lightweight dry screed – only 25 kg/m² – it was possible to install the panels in the floor structure underneath the weight distribution layer.
Three Siccus elements were integrated in the floor structure: the positioning plate, the heat emission plate and the PE-Xa heating pipe. Tecto pipe positioning panels were installed on the floors where we laid the new screed.
This system afforded us a quick and clean installation. While installing this system in conjunction with a 17 mm heating pipe, we were able to push the pipe positioning panels up over one another to connect the edges. The system required very little additional cutting and we were able to install 3,000 m² of Tecto panels quickly and easily.
The pipe positioning panels were easy to cut, allowing us to install the system quickly – even in rooms with unconventional shapes.

The energy for the system is generated by two condensing boilers, each with a capacity of 300 kW. With a supply temperature of max. 50°C and a return temperature of 40°C, these units ensure that the rooms remain at a mild, comfortable temperature. To allow the user to control the temperature, the radiant heating systems were expanded to include individual room control systems from Uponor. Wired room thermostats help to regulate the radiant heat from the floor and walls based on the weather conditions.
In addition, the individual room control systems ensure that the building complies with the legal requirements for energy-efficient and cost-saving operation. The result is comfortable and room-specific temperature control with a high level of energy efficiency.

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