References

Kranhaeuser



Uponor involvement

7100

Kranhaeuser

Fantastic, modern architecture directly on the Rhine in Cologne - the Kranhaus buildings

Project Facts:

Location
Köln, Germany

Completion
2008

Building Type
Office building

Product systems
Radiant Heating & Cooling

Address
Kranhaus Plus

Website
https://www.rheinauhafen-koeln.de/architektur/kranhaus-nord

Project Type
New building

Partners

architect
Bothe Richter Teherani Architekten
BDA
Oberbaumbrücke 1 20457 Hamburg
Germany

installer
PANDOMUS AG
An der Wachsfabrik 3 50996 Köln
Germany

Spectacular architecture distinguishes these three new buildings on the banks of the Rhine in Cologne. In the case of the Kranhaus Plus building, the challenge was to implement interesting architecture featuring large window surfaces and an interior ceiling height of at least 3 metres with ecological and economical energy concepts for year-round comfort.

The perfect location for an intelligent climate concept

The geographical and geothermal conditions of the site, such as the direct position on the Rhine, were used efficiently in the design process. The result: a clever climate concept that uses groundwater and renewable energy to activate the building's natural storage capacity with Uponor’s Contec concrete core activation system.

Silent cooling with Uponor’s concrete core activation system

In order to use the thermal activated building structure as efficiently as possible, the ceilings of the first thirteen storeys, which are not covered with any additional cladding, were fitted with Contec modules. The system uses plastic piping produced using cross linked polyethylene pipes (PE-Xa pipe), and in the Kranhaus Plus building a nominal width of 20 x 2.3 mm was applied. Thanks to the modular construction method, assembly is secure, fast and economical. The robust raw material is especially useful for application in harsh building site environments, where the demands on materials are high. Besides a high degree of flexibility, the Uponor PE-Xa pipe used for the Contec system also features increased resistance to pressure cracking.

Fast and easy connection using the Uponor Quick & Easy fitting system

When connecting the Contec modules in the Kranhaus Plus building for the distribution and manifolds piping, assembly was able to be implemented quickly with matching Uponor 'Quick & Easy' system fittings. This special connection technology, which is also used for radiator connections and tap water supply systems, exploits PE-Xa’s typical memory effect: the result is a stable and secure connection that doesn't require any time-consuming pressing, welding or soldering of the connection pipes. In the Kranhaus Plus building, spectacular architecture meets modern, ecological and economical technical building services. The systems used were selected in terms of their sustainability and combined with a modern holistic concept to utilise renewable energy.

Additional information

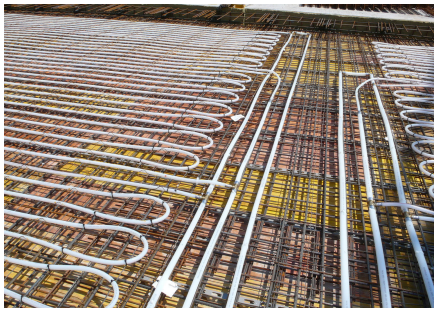
The Kranhaus buildings have even won the prestigious Mipim award. More about this at:
www.ksta.de/html/artikel/1233584132940.shtml

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