

References





#### Uponor involvement

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# LEO 250

"LEO 250" brings together sophisticated architecture and superb energy efficiency. Construction time was speed up due to the use of an Uponor systems.

## **Project Facts:**

Location	Completion
München, Germany	2013
Building Type	Product systems
Multi storey building	Radiant Heating & Cooling
Multi storey building	Radiant Heating & Cooling
Multi storey building Address	Radiant Heating & Cooling Project Type

#### Partners

architect KLAUS Wohnbau Niederlassung München Nymphenburger Straße 15 80335 Munich GERMANY

193 condominiums are currently being constructed on 250 Leopoldstrasse in Munich-Schwabing, projected to be completed by mid-2013. The apartments are located in a sought-after area and offer a great view of the Munich skyline. Planned by KLAUS Wohnbau, the buildings convince prospective buyers through both their exterior and interior qualities. All of the condominiums have already been sold before completion.

Uponor's heating systems have been used for 20 years

The project owners build and sell around 150-170 luxury apartments in Munich and Augsburg every year. For over 20 years now, floor heating has been a permanent design feature. Volker Grosshauser, General Manager and CTO at KLAUS Wohnbau GmbH, emphasises: "We prefer to rely on the expertise of a market leader, which is why we have been opting for Uponor's radiant heating systems for the last twenty years. What's important to us, apart from the quality and reliability of the products, is that Uponor supplies us with harmonised system components. Their excellent technical support is another big plus. With Uponor on board, we can install systems that are perfectly matched to our planning requirements."

The Uponor self-attaching floor heating system is quickly installed and easily modified. The fast installation concept speeds up the individual construction stages considerably, and any required follow-up work can commence immediately. For LEO 250, this meant that the apartments could be shown to potential buyers very early on.

#### Flexibility at a glance

The housing estate impresses with daring building geometries: Based on rectangular floor plans, the architects included a number of arching interior and exterior walls in their designs. This was also a good reason to opt for the flexible Uponor self-attaching floor heating system, as it easily accommodates a wide variety of room geometries.

The piping system chosen for the apartments consists of PE-Xa RED self-attaching polyethylene pipes (16 x 1.8 mm). These pipes are both flexible and sturdy, which makes them very easy to install. Additionally, they have excellent creep strength and are resilient against stress cracks. PE-Xa piping is shipped from the factory spiral-wrapped in self-attaching tape. Uponor's self-attaching insulation boards are fully covered with adhesive film. The insulation boards ship rolled or folded and in a range of thicknesses.

Fast installation which convinces

Installing the heating pipes is fast and cost-efficient as it requires no installation or fastening tools. The insulation boards are simply laid out and fastened together at the edges with adhesive film. Next, the pipes are rolled off and pressed against the

insulation boards – by foot and requiring very little pressure. The self-attaching tape on the pipes locks together with the adhesive film on the boards, instantly fastening the pipes. As was the case with LEO 250, the Uponor self-attaching system can therefore be installed quickly by a single person. This cuts down on assembly time and accordingly also on costs.

During the project's first stage of construction, aquatherm GmbH from Aschheim/Germany installed a total of 5,967 m<sup>2</sup> of Uponor self-attaching boards and piping in the initial 75 building sites. "The fast installation method totally convinced us. We were able to lay the pipes easily and without requiring any additional tools," says Wolfgang März, Managing Director for aquatherm GmbH.

Uponor's solutions for "green" buildings - comfort included

The LEO 250 housing estate is being built according to Germany's discerning KfW 70 Energy Efficiency House standard. As well as through energy-efficient radiant heating and insulation, LEO 250 further reduces its energy costs through using

## LEO 250





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