References

Hospital Crailsheim Helipad

Uponor involvement

- 5.000 Meter Uponor Magna Pipe Plus pipes in dimensions 20.0 x 2.0 Millimeter und 25.0 x 2.3 Millimeter have been installed.

Engineering that saves lives

The Uponor Meltaway system ensures that the helipad on the roof of the new hospital in Crailsheim remains free of snow and ice in winter.

A cold winter morning in Crailsheim, a town of 36,000 inhabitants in the Franconian-influenced north-east of Baden-Württemberg. Light snowfall is blanketing the landscape with a white layer. On the roof of the new hospital, a rescue helicopter is preparing to land. The rotor blades are whirling snowflakes through the air, yet the platform is completely free of snow and ice. This allows the helicopter to land safely. In an emergency, every minute counts for patients, which is why a safe landing pad that can be used all year round is essential for the crew on board. For the engineers responsible for the planning, it is the result of careful design and flawless execution. Working for healthcare: GF Building Flow Solutions and the Uponor Meltaway system.

Project Facts:

Location	Floor space	Completion
Crailsheim, Germany	ca. 730 m²	2025
Building Type	Product systems	
Health Care	Radiant Heating & Cooling	
Address	Project Type	
Gartenstraße 21, 74564 Crailsheim	Renovation	

Engineering as a lifesaver

The Uponor Meltaway system ensures a snow- and ice-free helipad on the roof of the new hospital in Crailsheim during winter on a 730-square-metre landing area.

The district of Schwäbisch-Hall has invested more than 100 million euros in Crailsheim Hospital over the past few years: in a new building that opened in 2016, in modernising the existing facilities, and now in a further hospital extension. On the roof of this second new building, 24 metres above ground level, the company Leonhard Weiss from Satteldorf constructed the 730-square-metre, circular helicopter landing pad with a diameter of 30 metres in autumn 2025 – a further improvement to the hospital's infrastructure. The landing pad cost a total of around five million euros. The complex steel substructure, assembled on site, placed high demands not only on structural engineering and execution, but also on the planning and implementation of snow and ice clearance. ''GF was the only manufacturer to take on this difficult task,'' says Tobias Kriegbaum, Sales Commercial South at GF Building Flow Solutions.

Complex and challenging pipework routing

The installation was particularly challenging due to the complex pipework routing and the filigree ceiling made of factory-prefabricated concrete elements with special double-insert reinforcement. This construction was necessary for structural reasons to absorb the enormous pressure of a rescue helicopter landing or taking off and to distribute the load across the surface. A helicopter can weigh up to six tonnes at take-off.
The planners at GF Building Flow Solutions had to position all the pipework precisely in accordance with the specifications and avoid crossings in the piping system. Furthermore, the Uponor Magna Pipe Plus pipes had to be laid over the steel girders at a precisely specified distance.

Safety on the hospital roof

The heating of the helipad is a central element of the new infrastructure at the hospital in Crailsheim. The Uponor Meltaway system provides a component-based heating solution specifically designed for outdoor surfaces with a solid surface – developed, for example, for hospital access roads, fire service areas or, indeed, helipads. ''The system ensures that chemical de-icing agents or mechanical clearing can be completely dispensed with,'' emphasises Tobias Kriegbaum. Instead, heat is distributed directly beneath the surface, reliably keeping the platform free of snow and ice.

5,000 metres of Magna Pipe Plus pipes In total, just under 5,000 metres of Uponor Magna Pipe Plus pipes in the dimensions 20.0 x 2.0 millimetres and 25.0 x 2.3 millimetres were laid. These run in several heating circuits within the surface, which was cast on site, and were routed into the connection chamber via a fire protection sleeve to comply with safety regulations. The pipework
is connected to the hospital's heating system via four distribution stations, each with 60 connections.

Precise control for maximum efficiency

Heating output is controlled via sensors that monitor temperature and humidity on the platform. Typically, flow temperatures between 35 and 45 degrees Celsius are selected for such systems to ensure sufficient heat transfer to the surface. ''The system only operates at full capacity when there is an actual risk of snow or ice,'' explains Tobias Kriegbaum. ''During milder periods, the heating output is automatically reduced – this saves energy and conserves resources.'' Integration into the heating system enables the efficient use of existing energy sources. The entire installation blends seamlessly into the existing building services.

Safety for staff and patients

The Uponor Meltaway solution from GF Building Flow Solutions at Crailsheim Hospital demonstrates how modern building services and well-thought-out planning work together to ensure safety and functionality even under demanding conditions. It

was crucial for the hospital that the helipad could always be used without restrictions. This reassures not only those in charge, but above all the people who rely on rapid medical assistance in an emergency.

Imagery from helipad