References

Panorama 2962 Zugspitze



Uponor involvement

- 720 m2 of Uponor underfloor heating Classic | 250 m of Uponor composite piping for connecting heating lines | 500 m of composite piping for drinking water distribution system

Panorama 2962 Zugspitze, Garmisch-Partenkirchen

At nearly 3,000 meters above sea level, Uponor ensures cosy temperatures and clean drinking water in Germany's highest mountaintop restaurant.
At Panorama 2962 atop the Zugspitze, Germany's highest mountain, state-of-the-art restaurant architecture meets innovative kitchen design. From its elevation at almost 3,000 meters, diners experience the natural spectacle first hand, gazing out over the magnificent panorama through floor-to-ceiling window facades while enjoying Alpine delicacies in a pleasantly climate-controlled setting. Uponor underfloor heating Classic ensures draught-free and comfortable radiant heat in Germany's summit restaurant. What's more, the designer and specialised construction company also opted for proven quality by installing composite piping from Uponor for the facility's drinking water system and interconnecting heating system.

Project Facts:

Location	Completion
Garmisch-Partenkirchen, Germany	2018
Building Type	**Product systems**
Hotels	Radiant Heating & Cooling, Multilayer Pipe Systems

Address	Website	Project Type
82475 Garmisch-Partenkirchen	https://www.zugspitze.de/	New building

Partners

Builder-owner:
Bayerische Zugspitzbahn Bergbahn
AG
www.zugspitze.de

Design: Johannes Hasenauer
Technisches Büro GmbH, Maishofen
www.tb-hasenauer.at

Construction: Luzian Bouvier
Haustechnik & Fliesen GmbH, Pflach
www.bouvier.at

Cosy temperatures in the mountaintop restaurant

The Panorama 2962 summit restaurant opened in July 2018 by the operating company Bayerische Zugspitzbahn Bergbahn AG combines a unique 360° panoramic view of the Alps with exquisite culinary delights to create an extraordinary Alpine experience. Fitting to the sweeping, breathtaking lookout across four nations, the menu features dishes from Germany, Italy, Austria and Switzerland. The restaurant offers indoor space for up to 450 diners, – plus seating outdoors for 850 more guests.

Pleasantly climate-controlled with underfloor heating

Visitors enjoy the warm interior ambiance of the Panorama 2962 summit restaurant all the more because outdoor air temperatures atop the Zugspitze rarely climb higher than five degrees Celsius (41°F), even in midsummer. Some 720 m² of Uponor underfloor heating Classic ensure comfortable radiant heat throughout the restaurant's interior. Radiators and air curtains are used in the entrance area and in the stairwell.

The Zugspitze is not only the coldest place in Germany, but also its sunniest, having long averaged 1,800 annual hours of sunshine. Understandably, a south-facing photovoltaic solar power system has been installed on the valley side of the building and on its roof, generating power to supply the three 45 kW cartridges for firing the building heating system water in the 300-litre buffer storage tank. Most of the power produced directly feeds the system.

Heating connecting lines and drinking water distributing lines of composite pipe

The heating water is heated up to a temperature range of between 35 and 45°C. The radiators and heating distributors for the underfloor heating system are connected by 250 meters of Uponor composite piping MLC with sizes ranging from 16 to 40 mm.

The water is preheated up to tap temperature in a 1,000 L hot water preparation buffer storage tank. A good 25% of the heating energy needed for this is generated by the waste heat from the refrigeration machines for the cooling cells in the kitchen using plate heat exchangers.

Every day, 6,000 litres of drinking water are pumped up to the top station from the valley station at Lake Eibsee. Drinking water supply is provided on four floors via 500 m of distribution and riser pipes that use the Uponor composite pipe system. Apart from the kitchen, the main consumers are the WC facilities.

Panorama 2962 Zugspitze, Garmisch-Partenkirchen













„Naturally, the Top of Germany needs top quality“.
Erwin Bouvier, Managing Director of the Bouvier Group