References

Silvretta Thermal Spa



Recharge your batteries in the Alps

Nestled in the heart of the Tyrolean mountains lies a spa offering the very best in wellness and relaxation. In line with its sustainable energy concept, the Silvretta Therme utilises a range of Uponor products – most notably underfloor and ceiling heating and cooling systems.

Project Facts:

Location

Ischgl, Austria

Completion

2022

Building Type

Sports facilities

Partners

Bauherr: Silvrettaseilbahn AG
Ischgl, Österreich

LUZIAN BOUVIER HAUSTECHNIK &
FLIESEN GMBH
Zams, Österreich
www.bouvier.at

Architektengemeinschaft Krieger-
Wimreiter
Velbert, Deutschland
www.architekt-krieger.de

Stiefmüller Hohenauer & Partner
GmbH
Kundl, Österreich
www.shp.at

Ischgl presents itself as the largest sustainable ski resort in the Alps. In recent years, the lifestyle hub has already taken a number of steps to keep CO2 emissions as low as possible. Since the start of 2021, Silvrettaseilbahn AG has been running all cable cars, chairlifts, mountain restaurants, snow-making systems and so on using 100 per cent green electricity from Austria. In addition, solar and heat recovery systems save around 80,000 litres of heating oil – and thus 244 tonnes of CO2 per year. But that's not all. Following a construction period of around three years, Ischgl has once again demonstrated how economy and ecology can be combined in Alpine tourism with the opening of the Silvretta Therme in winter 2022.

From relaxation to ice skating
With its artful terraced design, the Silvretta Therme blends perfectly into the Ischgl Alpine panorama, making a striking statement of exceptional architecture. Spanning four floors across two buildings, it offers a diverse leisure paradise: From indoor and outdoor sports pools to a spacious adventure pool with a whirlpool tower and an outdoor pool with a pool bar, there is something for everyone. Foodies will find plenty to enjoy in the three restaurants and bars. A large ice rink runs around the building. And a fitness area, equipped with state-of-the-art training equipment, offers a spectacular view of the village.

Another sustainable highlight to add to the list
The architectural firm Stiefmüller Hohenauer & Partner (SHP) has developed an energy concept for the Silvretta Therme that is entirely focused on sustainability. The landscape also serves as an energy source: the Silvretta Therme utilises the virtually inexhaustible thermal energy from the earth's interior and groundwater. To this end, 37 geothermal probes, each 290 metres long, were installed in the ground and a groundwater well was constructed. Three groundwater heat pumps and four brine-water heat pumps serve as heat generators. In addition, there are two high-temperature heat pumps for heating the drinking water. The deep boreholes can be used to cool the building in summer and, if necessary, during the transitional seasons. Only the peak load is covered by a gas boiler, ensuring that the spa remains pleasantly warm even when outside temperatures drop to as low as -25 degrees.

Heat pumps and underfloor heating: the ideal combination
"The building is heated exclusively via low-temperature surface heating and room ventilation," explains Norbert Fankhauser, an engineer at the SHP design office. In consultation with the installation contractor – Luzian Bouvier Haustechnik & Fliesen GmbH – the choice fell on Uponor systems. "We have been working exclusively with Uponor for 25 years and have always had a positive experience. That is why it was immediately clear to us that we would also rely on Uponor's diverse product range for this exceptional project," says Erwin Bouvier, managing director of the family-run business. As each room must meet the individual needs of visitors, various Uponor products were used, foremost among them the Uponor Classic underfloor heating

and the Uponor Thermatop M ceiling heating and cooling systems. With their lower flow temperatures, they not only contribute to climate protection but also offer a particularly high level of comfort thanks to their radiant heat. Last but not least, the extensive architectural design flexibility is another key advantage of surface heating systems.

Warm feet thanks to Uponor Classic

5,000 square metres: that is the area fitted with the Uponor Classic underfloor heating system. Throughout the building, this system was installed on top of the site-provided thermal and impact sound insulation. It is capable of both heating and cooling the rooms. “That is why we have also used this system in the events hall and the restaurant area. This allows us to maintain a comfortable room temperature in summer without draughts, which naturally increases user satisfaction significantly,” says Bouvier.

Keep a cool head with Uponor Thermatop M

The distribution of heating and cooling energy throughout the fitness and office areas has also been efficiently resolved: the Uponor Thermatop M ceiling system heats and cools a total of 250 square metres of the spa building. “Whilst we need a comfortable temperature in the gym so that fitness enthusiasts can give it their all, we need the air in the offices to be consistently cool in summer and consistently warm in winter,” explains Artur L. Mair, Key Account Consultant at Uponor Tyrol. The seamless, modular cooling ceiling is characterised above all by its ease of installation. The composite pipes can be suspended from conventional ceiling substructures. The drywall contractor can then carry out the panelling entirely on their own, ensuring that the heating and drywall trades are clearly separated.

Snow-free open spaces thanks to Uponor Meltaway

When sub-zero temperatures cover open areas with snow and ice, the Uponor Meltaway snow and ice control system is the ideal solution. With its robust PE-Xa pipes, it is suitable for use even in persistently low temperatures. The installation company Bouvier installed 300 square metres of the system around the pool access area and escape routes.

Everything under one roof

In addition to the panel systems, other Uponor products have been installed in the spa: Uponor S-Press PLUS composite pipes, with diameters ranging from 16 to 90 millimetres, are used for all the risers and distribution pipes in the heating system throughout the building. Pre-insulated Uponor Ecoflex pipes are used to connect the boiler room to the waste water heat exchanger. They combine minimal heat loss with high flexibility and easy installation. Uponor also contributed its expertise to the project: Artur Mair provided support as a solution-oriented consultant throughout all phases of the project, right up to on-site installation supervision. Having such an experienced and consistent point of contact on site is very important to Erwin Bouvier. “Of course, the quality of Uponor’s products speaks for itself. But for me, the personalised support at every construction site also plays a major role. Mr Mair is always on hand and has a suitable solution ready for every problem on site.”

A good start

Since its opening on 8 December 2022, the Silvretta Therme has seen a steady stream of visitors. In total, Silvrettaseilbahn AG invested around 75 million euros in the project, thereby creating around 80 year-round jobs in the region. With its diverse range of facilities, the spa is a boon for locals and visitors alike: here, high up in the Alps, you can recharge your batteries – a place for health, sport, relaxation and socialising.