

CASE STUDY INGENIOUS WARMTH IN THE HOTEL INDUSTRY Mountain Resort Feuerberg | Carinthia

THE SITUATION AT THE OUTSET.

Paradoxical as it may sound, every year global warming brings unpredictable amounts of snow in many areas. This certainly has positive effects on ski tourism, but hotel owners in the mountains often find themselves in delicate situations. Too much snow and thus too high roof loads pose risks for guests and the hotel building. The Ski-Hotel Feuerberg in Carinthia, at a height of 1766 m, was looking for a solution to protect itself from snow accumulation on the roof.

THE CHALLENGE.

The architecture of the hotel presented the planning team with some challenges. The large roof areas of the entire hotel area increase the probability of snow accumulation at individual locations, which can then lead to selective static overloads. Due to existing sloped roofs, snow masses can rapidly slip off and pose a hazard to hotel guests. ETHERMA solved this problem and thus also the snow with an individual roof surface heating.

THE ETHERMA SOLUTION.

The ETHERMA planning team delivered a perfect construction solution. The tailor-made DSN heating mats helped to prevent localised accumulations of snow and are particularly robust and extremely weather-resistant. This thus ensured uniform defrosting. Efficient use is guaranteed thanks to fully-automated control. Thus, roof surface heating is only switched on once a sufficiently low exterior temperature and certain humidity level have been reached. Then the roof heating begins to melt the snow quickly and reliably, protecting the roof and the static structure of the hotel.



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THE SOLUTION IN DETAIL

The DSN heating mats were installed over a large area in the roof areas that are particularly at risk. These consist of a fibre-glass armoured braid, onto which a 2-pole heat conductor with braided mesh and UV-resistant outer insulation is mounted. Our unique stitching technology with UV-resistant Teflon thread guarantees 100 % smooth laying and heating mat stability. Due to the architecture of the hotel building, it was made-to-measure in the factory according to the individual requirements.

In addition, a self-regulating heating tape EGT would be recommended to prevent the further danger of ice buildups in the downpipes. The ETHERMA Gutter Trace EGT guarantees that melt water is kept free of ice in the downpipes, thus ensuring safe drainage.

ETHERMA DSN - PRODUCT BENEFITS ROOF HEATING SYSTEM

- + Planning of the project and custom-made production
- + Connection line custom-made
- Sewing technology guarantees constant output and life span
- + Stable surface performance
- + Webs simplify mounting and installation
- + UV-, ozone- and weather resistant
- Resistant to acids and bases

ETHERMA GUTTER TRACE - EGT - PRODUCT BENEFITS

- + Output: 36 W/lfm in ice water
- + Particularly fast heating response, rapid defrosting
- + Can be cut to length, and can also be custom-made in our plant on request
- + Self-regulating function heating strip reduces output autonomously
- + Can be installed in plastic guttering
- + Dual installation in downpipes permissible
- + UV and ozone-resistant
- + Fast, easy installation, power connection required on one side only

EXPERTISE AND QUALITY FOR MORE THAN 35 YEARS.



With ETHERMA, you have an expert partner for your heating solutions with more than 35 years of experience. You will benefit from our continuous innovation, high-quality products and modern design. We offer an extensive range of services to support you and can find a product solution suitable for your individual requirements. As an Austrian business active internationally, our electrical heating systems are made to measure, in-house.









- A Supply conductor 1.25 mm²
- B Self-regulating heating element
- C Insulating sheath polyolefin XLPE
- D Protective meshwork tin-plated copper
- E Protective sheath polyolefin

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