



EMBARGO SEPTEMBER 25, 2009, UNTIL 2:00 P.M. CET

ETH Zurich and the Swiss Alpine Club (SAC) present “hut of the future”

New Monte Rosa Hut SAC opens its doors

Zermatt, September 25, 2009. **The “hut of the future” is finished. After about six years on the drawing board – two of which as a student project design – and a construction phase spanning two summers, the New Monte Rosa Hut above Zermatt is finally open for business. Nicknamed “Mountain Crystal”, the innovative building generates over 90 percent of its energy itself. It is scheduled to start receiving guests normally in March 2010 and will continue to serve ETH Zurich as a research object in power and building service engineering.**

2,883 meters above sea level, the New Monte Rosa Hut is currently the most complex wooden construction in Switzerland. Covered in a shimmering silver aluminum shell and with a photovoltaic system integrated in the southern facade, it generates its own power and is expected to be at least 90 percent energy self-sufficient. Solar collectors installed in the grounds generate solar heat, which provides warm water and heats the ventilation system’s supply air to control the temperature in the rooms. In the few months of the year where the ice melts, the water is collected and stored in a cavern to provide the guests with flush toilets and four hot showers. A bacteria-based microfiltration system cleans the sewage; the graywater is then reused to flush the toilet and for washing.

Computer in Zurich operates hut technology

Such a high degree of energy self-sufficiency requires the interaction of the individual components and shrewd energy management. Software developed at ETH Zurich is to operate the technology at the hut. The relevant data from the reservation system, energy storage and the weather station, for instance, is conveyed from the hut to a computer at ETH Zurich. The computer then uses the data to maximize the degree of energy self-efficiency. Any actions subsequently necessary – such as the command to engage the combined heat and power unit if the solar radiation is insufficient to generate enough power – are communicated back to the hut and performed automatically.

Today, representatives of ETH Zurich and the SAC inaugurated the New Monte Rosa Hut together with the general planning team and various patrons and sponsors. Numerous media representatives also took the opportunity to visit the innovative building at the foot of the Dufour Peak overlooking the Matterhorn.

The corner stone for the building was laid in August 2008 and the foundations were completed before the onset of winter. Thanks to prefabricated elements, which were initially transported by train and then flown to the building site by

helicopter and assembled on site, the building was completed in the summer of 2009 after just five months. After the inauguration, the 120-bed hut will close for the winter before reopening for alpinists in March 2010; the season lasts until September.

Milestone for sustainable building

With its combination of outstanding architecture and groundbreaking technology, the project heralds a new chapter in sustainable building. ETH Zurich is looking to use it as an example of how marrying excellent architecture with sustainability and state-of-the-art technology can work. For the SAC – with over 120,000 members, one of the biggest sports unions in Switzerland – the building of the new hut is a milestone in its 145-year hut history.

The New Monte Rosa Hut cost about 6.5 million Swiss francs. Apart from the SAC and ETH Zurich, a number of patrons and sponsors also pitched in, without whose support the ambitious project would never have been possible.

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Weblink for photo downloads:

www.media.ethz.ch/news/Neue_Monte_Rosa-Huette

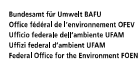
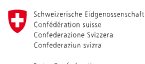
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