



Completing a contemporary wellbeing facility

At a glance

Client

Kristall Salz Welt

Architect

Diana Hollacher

The challenge

To provide a glass geodesic dome skylight for a new contemporary wellbeing facility in Austria.

The solution

9.3m diameter SOLARDOME[®] PRO skylight

Dome specification

- Four-frequency low profile geodesic dome
- Diameter – 9.3m
- Height – 2.7m
- Volume – 102m³
- Floor area – 68m²
- Able to withstand over 3.12KN/m² of snow loading and 0.901 KN/m² wind loading
- Double-glazed (U value 1.2 w/m²)
- Exterior metal components polyester powder coated white

The challenge

The founders of Kristall Salz Welt (Crystal Salt World) had a vision to create a contemporary wellbeing facility that was both architecturally striking, and also a place that enabled the team to live and work in harmony with the natural environment. All on a 9,000m² site on the shores of Lake Attersee in Austria.

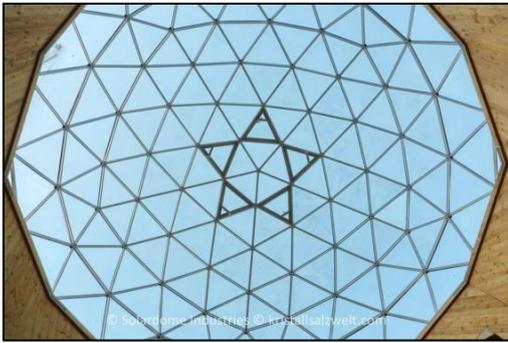
Diana Hollacher, co-founder and project architect, believes that buildings should help people to connect with nature. Her beliefs, as well as her passion for geometry and ancient building philosophies, were fundamental to the design of the building and the specification of a geodesic dome skylight to cover the central two-storey atrium of their new building.

The skylight requirements were to provide a central feature, maximum light, complete weather protection from the high winds and snow loading of the Austrian climate and fit over the atrium of a unique 12-sided, 8.3m tall building.

The solution

A SOLARDOME[®] PRO skylight, custom designed and manufactured, using the SOLARDOME[®] PRO architectural system, to fit the dimensions for a central circular two-storey atrium. The incredibly strong and robust geodesic design is able to withstand the potentially damaging wind and snow loading pressures in Austria.

Once onsite, the 9.3m diameter, 2.7m tall PRO skylight took just a week to install and glaze. Designed to European standards, the completed PRO skylight contains 75 double glazed panels, five digitally controlled vents and almost 200 metres of recycled aluminium. With a structural lifespan of over 100 years the aluminium frame means the dome is virtually maintenance free.



The results

At the end of 2013, Kristall Salz Welt welcomed its first guests. Complete with a bespoke SOLARDOME[®] PRO skylight, the 12-sided commercial building stands 11 metres tall. The impressive two-storey atrium with skylight at its summit forms the heart of the building and is a tranquil place to welcome guests, benefiting from the abundance of natural daylight and natural ventilation. From the atrium, guests go on to enjoy the salt healing rooms, dining area and seminar facility.



The PRO skylight connects people to the outside providing an ever changing canvas of the sky, whether it's bright blue, grey and stormy, or stars at night. This closeness to the outside is fundamental to the buildings' design and fulfils Kristall Salz Welt wellbeing vision and philosophy. Both mesmerising and calming, the lattice of triangles from the geodesic design can be seen reflected around the building. It is this pattern of lines and shapes which also gives reassurance of its strength and solidity.

"I wanted a place that was peaceful. It had to be beautiful, have simple lines and provide the perfect restorative environment. The structure needed to be solid and safe, but also be part of the healing process at Kristall Salz Welt – not detracting from, but helping people connect with nature and experience a truly natural healthy environment. The geodesic SOLARDOME[®] PRO skylight was central to my vision – providing natural light in abundance, protection from the elements and creating that perfect calm space with views of the sky."

Diana Hollacher, Architect



The facility

The wellbeing philosophy can be seen in every element of this building's design. Internal furnishings in the healing rooms have been made from salt crystal blocks. Walls, floors and seats showcase the natural pink tones of the salt and create a natural environment that has been shown to be beneficial to the human body.



With views overlooking Lake Attersee and into the elegant central atrium, the second floor is home to living accommodation. There are two apartments, which are simply furnished and further reinforce the desire for maximum light and space. The building has created a harmonious approach to living and working providing very distinct areas, yet all part of the complete vision, both benefiting from natural light and closeness to nature.

"I have been impressed with the Solardome team. They have been polite, professional, diligent and very efficient throughout the whole process."

Diana Hollacher, Architect



The future

The vision for the land at Lake Attersee goes beyond the wellbeing building. Next door the Kristall Salz Welt founders are also creating a unique 'dome home'. Due for completion in 2014, the custom made dome SOLARDOME® PRO measures 10.6m in diameter with a height of 5.4m at its centre.

Comprised of two thirds double glazed panels and one third traditional Austrian wooden panels and shingles it combines both traditional and modern building methods. With a total of 160 glass panels used in its structure, light penetrates the living area of the building and provides expansive views to the outside world. The traditional Austrian larch-wood shingles provide insulation and seclusion for the internal rooms that with a mezzanine level includes, a lounge, bedroom, bathroom, office and kitchen area. With no internal supports needed to complete the dome structure the internal space has been designed to match the dome shape. Complete with all amenities, including internal wall heating and log burning stove the dome home is an innovative approach to living, and one that invokes a constant feeling of being at one with nature.



Kristall Salz Welt's vision for the site doesn't stop here. The dream is to create a complete haven for guests, with plans for further dome buildings, specific treatment rooms and additional conference facilities. At the core of any future structures will be Diana's continuing and unwavering belief that buildings should connect people with the natural and healthy environment in which we live.

www.kristallsalzwelt.com