Project:

Schönbrunn Zoo Vienna, Austria

Building Type: Polar Bear, Animal Enclosure

Vienna's Tiergarten Schönbrunn (Zoo) was awarded the Best Zoo in Europe in 2010, and is a UNESCO World Heritage Site. In 2014, the Polar Bear World (Eisbärenwelt) exhibit was opened in great anticipation, adding polar bears to the famous zoo for the first time. Daylighting was a critical part of the design of the enclosure.

Objective

The polar bear indoor retreat area was an essential part of the exhibit. The enclosure consists of rooms, cages, visitor tunnels, employee passages and a kitchen, and was built underground to maximize free space for the polar bears to roam around above ground. The retreat area consists of 4.3 m², and was designed by architect, DI Peter Hartmann und DI Frank Leopold. The total cost of the project was € 10,700,000, built by Burghautmannschaft Österreich. The builder consulted with Forthuber Doris Tageslichtsysteme to bring daylight underground with the use of Solatube® Daylighting Systems (DS).

Solution

The builder and design team chose to daylight several areas of the underground enclosure with the Solatube SolaMaster® Series 750 DS (530 mm diameter), which is engineered specifically to deliver consistent daylight during the day by capturing low-angle sun rays with Raybender® 3000 technology. The visitor tunnel has two 750 DS-O units installed to allow guests to view the polar bears while they explore under water. The kitchen where food is prepared for the bears and passage for employees are all now illuminated by natural daylight with the use of the Solatube Daylighting Systems. A stairwell that adjoins the polar bear enclosure to the rain-forest house also had a Solatube DS installed to maximize daylight.

Products Used

• 6 Solatube 750 DS-O (21 in/530 mm Daylighting System)

Testimonial

"We are excited that we can install Solatubes in the oldest Zoo from Austria. In this time we bring daylight in the underground when the keeper goes to the cages and in the kitchen they need no electrical light during the day."

-Doris Forthuber, Tageslichtsysteme e.U.











