Case Study

Project:
Van Kempen Partnership
Leunen, The Netherlands
Building Type: Pig Stable, Farming

The Netherlands’ Van Kempen Partnership, located in the city of Leunen have recently constructed new pig stables. Since the company is affiliated with “Het Varken van Morgen” (The Pig of Tomorrow), they are focused on the mission of humane sow farming. This initiative focuses on three themes which include animal welfare, the environment and human health.

Objective
The new construction of the stables required a minimum daylight surface of 2%, which is mandated by the “Maatlat Duurzame Veehouderij” (or “Yardstick for Sustainable Livestock”). This minimum daylight factor was already achieved by a strip of windows that run the perimeter of the stable. However, for the well-being of the employees and the animals, more natural light is preferable. Translucent panels on the roof were not an option due to plant growth and greenery that would eventually cover the panels and reduce the transmission of light over time.

Solution
In order to reduce thermal heat gain and the problem associated with translucent panels, the design team worked with Techcomlight in The Netherlands and decided to install Solatube® Daylighting Systems throughout the stables. The acrylic properties and the shape of the Solatube Daylighting System dome reduce any major routine maintenance. And since Solatube has multiple flashing options, the installation fit perfectly with the roof to prevent leakage. Now daytime lights are not needed and save Van Kempen on their energy bills, while providing a pleasant naturally lit stable for the sows.

Products Used
• Solatube 330 DS-O (21 in/530 mm Daylighting System)

Testimonial
“The stalls with the Solatube [product] are better for the animals and the people who work there. The sows are under artificial fluorescent lighting only on winter mornings. The rest of the days our stables have plenty of light coming through the Solatube [systems]. In the spring, we had to cover the windows on the south side of the barn so that they do not get direct bright sunlight on the pigs. The Solatube [Daylighting Systems] give pleasant diffused light.”  - Jan Van Kempen, Owner Van Kempen Partnership