



Project:

HaRo, Germany

Application:

Vaulted skylight system for the roof area of a production hall Lexan® Thermoclear® 10 mm

Sizes:

Overall length 50.16 m and 2.66 m wide

Technical details:

U - value: 1.93 (W/m².K)

Light transmission: 65 %

Owner:

HaRo Anlagentechnik GmbH

Contractor:

Roda Licht- und Lufttechnik GmbH

Reasons for selection:

The project concerned the restoration of an existing production hall, to meet the needs of today's users - with possible further hall restorations in the near future. A new vaulted skylight system was installed. Here, a key aspect was the overall illumination of the hall. Reduction of glare was important for the users, whilst obtaining the best possible levels of natural light.

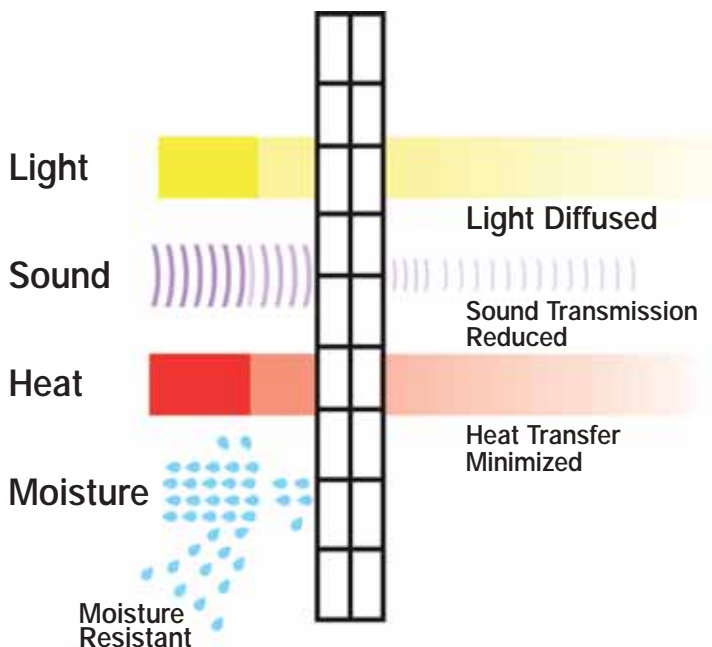
Testimonial / Quote:

According to the manager of the production hall, the newly restored hall provides an excellent combination of high lighting and low glare:
"The final result is great and far exceeds our expectations. We did not believe that this would have been possible."



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The Only Eco-Insulation for High-Performance Daylighting



Characteristics of Nanogel®

Particle size range	0.5 to 3.4 mm
Bulk Density	60-80 kg/m ³
Surface Chemistry	Fully hydrophobic
Light transmission	up to 40 % in 25 mm panel
Thermal conductivity	0.018 (W/m.K)
Insulation value U value	0.89 in 25 mm panel
Sound speed	100 m/sec vs 340 m/sec in air
UV stable	no discoloration
Growth of mildew/fungus	no
Combustible	no
Smoke generation	no

Benefits of Nanogel

- Light transmission and insulation combined
- Better diffusion of light
- No colorchange in accelerated weathering tests
- Thermal Insulation:
 - Doubles insulation
 - No downdrafts
 - Better comfort at lower cost/HVAC
- Displaced dewpoint: No condensation
- Acoustical Insulation: 50 % reduction @ 100 Hz
- Very low weight: 60-80 gram/litre

Features & Benefits to Architects / buildingowners:

Light

Diffusion	Larger panels	----> Architectural freedom
	No shadows	----> No investment
	No sunshades	----> No maintenance

Insulation

Thermal	No heat loss	----> Cost reduction
	No downdraft	----> Better comfort
Acoustic	Sound dampening	----> Better comfort
	Reduction hail/rain	----> Increased productivity

Sound

Esthetics	Greater architectural freedom
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Warranty:

10 years on Loss of light transmission, loss of thermal conductivity and UV resistance.

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creating what matters