

Application Profile



Project:

Apartment Building, Schwabing-Munich, Germany

Product and Sizes:

Profilit™ glass K 25/60 1.7 +
25 mm polycarbonate sheets filled with
Nanogel® aerogel

Technical details:

U-value: 1.25 (W/m².K) (estimated)
Light transmission: 30%
Sound transmission: 46 dB

Owner:

BV Ibscherhaus München

Architect:

Bauer & Steinert
Bahnhofstrasse, 24
D - 82467 Garmisch-Partenkirchen
Tel: +49 88 21 30 00
E-mail: bau_stein@t-online.de

Contractor:

Bauman
Baugesellschaft mbH
K. Baumann
Bahnhofstr. 10
D - 83059 Kolbermoor
Tel.: +49 8031 90 98 880
Fax: +49 8031 90 98 870

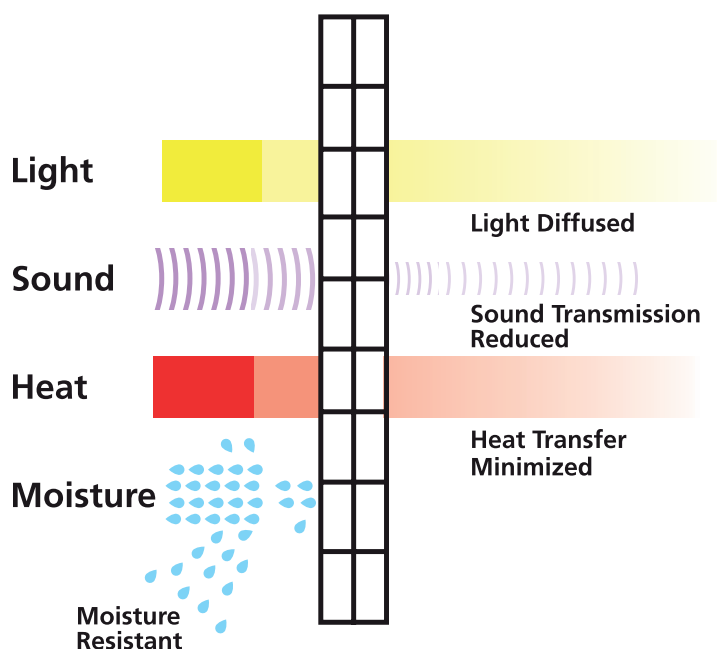
Glazier:

Glasbau Hermann Oberhauser
D - 84494 Niederbergkirchen
Tel: +49 86 35 995
E-mail: info@glasbau-oberhauser.de

Reasons for selection:

This apartment building is located in a busy street in the center of Munich, where the noise from the heavy traffic was a real issue. The owner of the building required the best possible thermal and acoustic insulation, as well as distinctive light diffusion inside the dwellings. All these requirements have been met with Nanogel aerogel filled panels.

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 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 color change 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/building owners:

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

Aesthetics	Greater architectural freedom
------------	-------------------------------

Warranty:

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

North America

Cabot Corporation
157 Concord Road
Billerica, MA 01821
U.S.A.
T: +1 978 670-8050
F: +1 978 670-7045

Europe

Cabot
Interleuvenlaan 15 i
B-3001 Leuven
BELGIUM
T: +32 16 39 25 78
F: +32 16 39 25 79

Asia Pacific

Cabot Specialty Chemicals Inc.
Level 21, MNI Tower 2
11, Jalan Pinang
50450 Kuala Lumpur,
MALAYSIA
T: +60 3 2164-8352
F: +60 3 2162-0253

South America

Cabot Latin America Division
Rua do Paraíso, 148 - 5th floor
Paraíso CEP 04103-100
Sao Paulo SP
BRAZIL
T: +55 11 2144 6400
F: +55 11 3253 0051

China

Cabot (China) Limited
558 Shuangbai Lu
Wujing, Shanghai 201108
CHINA
T: +86 21 6434 7766
F: +86 21 6434 5532



www.nanogel.com

This information is provided as a convenience and for informational purposes only. No guarantee or warranty as to this information, or any product to which it relates, is given or implied. This information may contain inaccuracies, errors or omissions and CABOT DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO (i) SUCH INFORMATION, (ii) ANY PRODUCT OR (iii) INTELLECTUAL PROPERTY INFRINGEMENT. In no event is Cabot responsible for, and Cabot does not accept and hereby disclaims liability for, any damages whatsoever in connection with the use of or reliance on this information or any product to which it relates.