

OKAGEL Light Diffusing Nanogel Insulating Glass

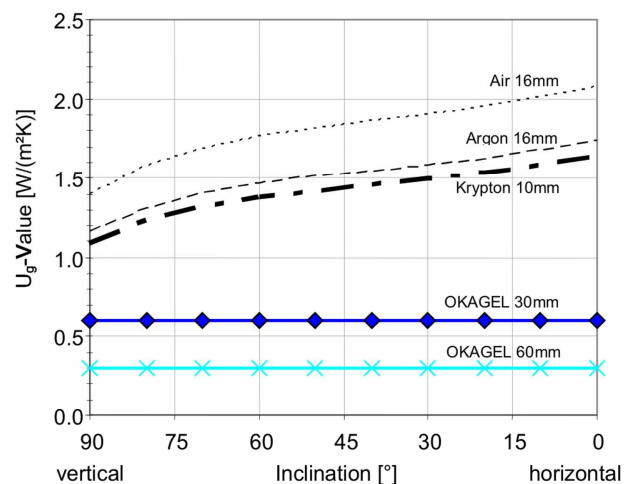
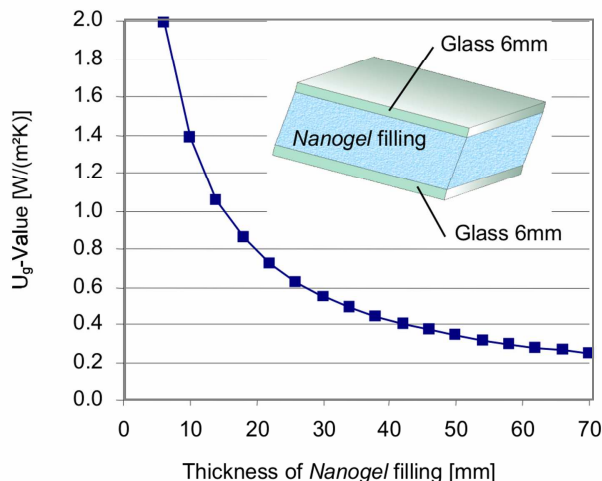
OKAGEL Light Diffusing Nanogel Insulating Glass offers a heat insulation quality so far unknown. The translucent nanoporous granulate in the cavity results in

- Best possible even light distribution into the room, independent of changing irradiation conditions together with glare protection
- project-specific light transmission and total solar transmittance
- excellent heat insulation
- outstanding sound attenuation
- UV control according to requirements
- appealing appearance of insulating glass in daylight or artificial light
- effect of depth when viewed from inside and outside

Technical data

U_g	0.3-0.6 W/(m ² K) (0.11-0.055 Btu/(hr ft ² °F))	Thermal transmittance according to DIN EN 673, DIN EN 674
TSET	≤ 61%	solar heat gain coefficient according to DIN EN 410
T_v	≤ 59%	Light transmission according to DIN EN 410
R_w	≥ 52 dB	Sound reduction coefficient DIN EN 20140

The above data are approximate data. They are based on measurements of official testing institutes and calculations derived from these measurements.



U-value OKAGEL depending on thickness and inclination angle.

Composition

Cavity, glass types and thickness according to requirements. We recommend the use of toughened/tempered glass for the outer pane and laminated safety glass from heat strengthened glass for the inner pane.

Dimensions

Maximum dimensions 1000 mm x 2000 mm.

Planning instructions

Builder-owners and architects must be able to technically assess the effect of glazing in daylight terms. OKALUX offers such calculations as a voluntary additional service. The daylight-relevant properties of the room to be examined must be known; in particular, these are:

- room geometry, window dimensions
- approximate degree of reflection of the surfaces forming the room boundaries

The so-called daylight quotient (D) in accordance with DIN 5034, Part 3, is relevant for the evaluation of the ambient daylight. This gives the ratio between the horizontal luminous intensity indoors and out of doors, under a completely overcast sky. This value can be calculated for different glazing variants using the existing simulation tools. The customer can thus assess the light-directing effects of special products, in comparison with normal glazing as well. In addition to the assessment in accordance with DIN, virtual images can visualise the light distribution in the rooms.

Slight fluctuations in the density of the capillary slab and the diameter of the capillary slab may be visible. Under certain lighting conditions, fine lines may be visible within the capillary slab due to production-specific reasons.