

General recommendations for glazing with OKALUX insulating glass products

1. Design

The design must be in accordance with the current version of the "Technical Rules for the Use of Continuous Glazing" of the German Institute for Building Technology (DIBt).

2. Glass penetration

To prevent the glass edges being subjected to excessive thermal stress, the glass penetration on the inside pane must not exceed the depth of the edge joint or a maximum of 15 mm measured from the edge of the glass.

The glazing support must be screened by the outer window glazing bar or outer sealing tape to prevent heat from accumulating in the area of the support, even when exposed to oblique insolation. The width of the outer screen, measured from the edge of the glass, must be at least 15 mm.

3. Product-specific instructions for OKASOLAR insulating glass

OKASOLAR insulating glass is installed like standard insulating glass. In order to absorb the movements of the OKASOLAR louver inlets caused by temperature changes, a small clearance must be maintained between the inlet and the spacers. So that these do not become visible as a "viewing slot" after installation, the outer screen should overlap the edge of glass via the sealing system by at least 15 mm. As an alternative, the edge zone can be screened by a screen print.

4. Sealing tapes

For the glass support, we recommend sealing lip tapes made of APTK, EPDM or silicone of approx. 60° Shore hardness. Foam tapes are not suitable. With glass support tapes higher than 6 mm, there is a risk of deformation caused by pressure from the screws which hold down the cover strip and, consequently, a risk of fracturing the glass pane.

For the outer seal, with designs which are slightly inclined or difficult to seal for other reasons, it is advisable to use silicon sealing-lip tapes since these are the only tapes which can re-seal.

According to the system manufacturer's instructions, the pressure exerted by the cover strips must be enough for the covering elements to exert a uniform pressure via the edge of the glass without bending it. The hollow sections of the sealing-lip tapes must not be crushed until they cease to be effective.

5. Padding

The materials which are used for padding must be rot-proof and free of plasticiser. With stepped insulating glass, for a maximum roof slope of 45°, it may be sufficient to secure the outer pane by offsetting the covering element. The real padding is applied to the inner pane.

6. Vapour pressure equaliser holes

The glazing rebate must be fully and permanently operational, dried and ventilated. Condensate or ingressed water must be able to drain at the ends of the glazing bars on the side of the eaves, particularly with sloping roof glazing.

7. Glass butt joints

To make sure that water can drain at glass butt joints unhindered, with roof glazing, we recommend a blunt glass butt joint with sheet metal bonded on top at the factory. **Details must be agreed with us.**

8. Point-supported and SG glazing

For point-supported glazing, please ask for our separate information sheet. Details on SG glazing (structural glazing) will need to be agreed with us where applicable.

9. Dangers with glass damage

Where we are unaware of the circumstances under which our insulating glass is being used, we assume that it is being used under normal conditions. Normal conditions are defined as humidity and air temperature conditions which generally prevail in areas used by people. Both the inner pane and the outer pane must be ventilated over their entire surface. Care must therefore be taken with frame designs, dummy glazing bars, wall connections, blackout systems inside and screening systems outside.

After glazing, damage can occur particularly from:

- Blackout and screening systems which have not been agreed
- Partial or complete screening of glass surfaces inside or outside
- Heating pipes near the frame, hot-air outlets near the glass
- Reflector lamps, baker's ovens and foundries
- Working with hot asphalt and hot bitumen inside or outside
- Welding and flexing work
- Lime, cement and silicon residues
- Glass adhesive residues which have not been removed
- Cleaning which has not been carried out properly

10. Cleaning instructions for OKALUX insulating glass products

Ask where applicable.

11. Preservation of capital

In order to maintain the guarantee and extend the life of the insulating glass, it is essential to carry out functional tests at regular intervals. All necessary maintenance work, such as checking the drainage and pressure equalisation holes, must be carried out regularly and in time.

GENERAL CUSTOMER NOTES



We take architectural glass a step ahead.

12. Glazing details

On request, we are prepared to check the glazing details using structural plans which clearly show the details which are crucial for the safety of the insulating glass. The documents must be available in time to make any changes to the design which may be necessary.

13. Light calculations

On request, we will carry out daylight calculations as part of our free consultation service. Please note that these calculations and simulations cannot be used as a substitute for planning and assessment by a consulting engineers centre. They serve rather to make it easier to assess the effect of our glazing systems on the room climate and room lighting and compare it with that of standard situations.

14. Other printed matter

If you do not already have the following documents, please ask if you need them:

General instructions as well as advice on quotations and technical advice on OKALUX insulating glass products

Caution during installation

Cleaning instructions for OKALUX insulating glass products

General Terms and Conditions of Business

Product-specific information on:

OKASOLAR Glazing with Integral Sun Control Louvres

OKATHERM Double Glazing Units with heat and solar protection coating

OKALUX Insulating Glass products with alarm glass

OKALUX Insulating Glass with ceramic screen printing or enamelling

Use of OKAPANE / KAPIPANE in double-shelled U-profile glass