



Useful information on

Glass breakage in sliding doors and windows

Prevention of glass breakage in sliding doors and windows

Heat-insulating glass with Low-E coatings is now used as standard in sliding doors and windows. When operating these window elements, glass breakage due to overheating may occur under certain conditions.

Insulating glass with Low-E coatings is well known for its excellent thermal insulation properties. These types of glass let short-wave solar radiation through almost unimpeded, while long-wave radiation, such as heat, is reflected, i.e. is not allowed through. Under special circumstances, this physical interaction may have a negative effect on sliding windows or sliding doors. If the elements are pushed on top of each other and exposed to the strong sun for an extended period of time, the space between the sliding elements may heat up to such an extent that the pane breaks as a result of thermal shock.

Possible precautions against such breakage as a result of thermal shock are as follows:

- Do not allow sliding doors or windows to be pushed over one another in direct sunlight.
- Attach or operate shading systems (close fully, no partial shading).

In unavoidable sunlight: Use single-pane safety glass or heat-strengthened glass instead of normal float glass. This increases the resistance to temperature changes. This measure virtually eliminates the risk of glass breakage due to the effect of temperature. Where single-pane safety glass or heat-strengthened glass cannot be used for technical reasons, we recommend processing the edges (smoothing, grinding or polishing) and ventilating the gap so that the temperature shock resistance threshold of float glass of 40° K is not exceeded under any circumstances.

