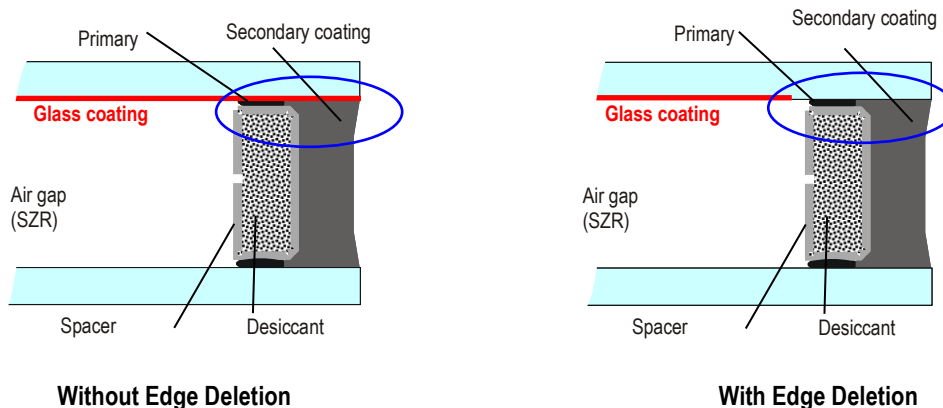


Structural Glazing / Edge Deletion of Insulating Glass Status: 02.04.2020

Please observe the following information aimed at protecting you and your customers from damage and so as not to endanger any claims for compensation and warranty claims. The following information is designed to draw your attention to specific details which are often overlooked, but are important, and therefore must be considered. As such recommendations are of a general nature, and not aimed at each specific case, they do not lay claim to completeness. All valid laws, directives, standards and recognised technological regulations must also be observed. Please refer to the separate enclosures for product-specific information. Please contact us if there is any doubt. Non-compliance with this information will endanger any claims for compensation or warranty claims.

Edge Deletion

Modern insulating glass manufactured in accordance with *DIN EN 1279* typically comes with a functional coating. Such heat insulating or solar protection coatings are implemented primarily as soft coatings using the magnetron sputtering process. Metal-coated glass surfaces can have different adhesion properties, which is why we recommend that our customers generally order glass products that are not coated at the sealant. These areas can be masked off prior to coating or decoated mechanically before the glass is further processed.

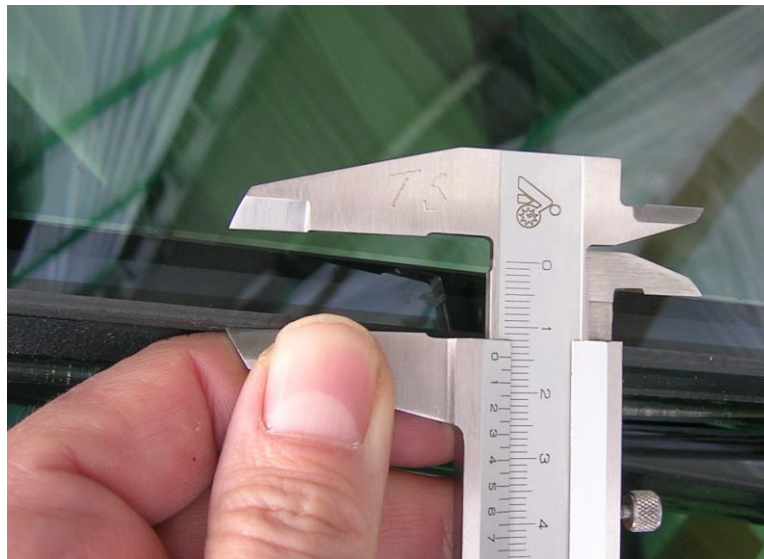


Performance

Surfaces that have not been decoated are more likely to have moisture seep under the primary (butyl) seal. This can lead to the metallic functional coatings oxidizing and an increased loss of gas if a gas charge is used. Ordering windows without sufficient edge deletion can thus hinder performance. Sufficient deletion, on the other hand, plays a key role in increasing the service life of insulating glass.

Red lines

The edge bond of insulating glass and the design characteristics of this area are visible when the glass is not installed in a full frame. The *Richtlinie zur Beurteilung der visuellen Qualität von Glas im Bauwesen* (guideline for evaluating the visual quality of glass for architectural glazing) makes special mention of this and excludes the area of the edge bond (to 18 mm) from the evaluation. Red lines can also form near the edge and become visible if all or part of the primary seal rests on top of the coating. Green or blue tinges may also appear, depending on the coating systems used. This phenomenon occurs primarily with glass coatings created via magnetron sputtering and cannot be avoided for technical reasons and does not qualify as a reason to submit a complaint. If red lines must be avoided for technical or aesthetic reasons, we ask that the customer specifically request sufficient deletion when placing an order.



White Lines at the Edge Bond of a Solar Protection Glass Pane

White lines

Sufficient deletion can lead to a gap forming between the coating and the primary coating of the edge bond. White lines then appear. This phenomenon also cannot be avoided and does not qualify as a reason to submit a complaint. Neither the functionality of the insulating glass unit nor its service life are compromised, however. In fact, a small gap between the butyl cord and the coating ensures optimal performance for years to come. The *Richtlinie zur Beurteilung der visuellen Qualität von Glas im Bauwesen* (guideline for evaluating the visual quality of glass for architectural glazing) makes special mention of changes in appearance that can result from the interaction of materials and excludes the area of the edge bond (to 18 mm) from the evaluation. White lines are included among the changes in appearance listed and thus are not to be regarded as a visual or functional defect. The formation of white lines does not qualify as a reason to submit a complaint and is consistent with state-of-the-art production.

Structural Sealant Glazing (SSG)

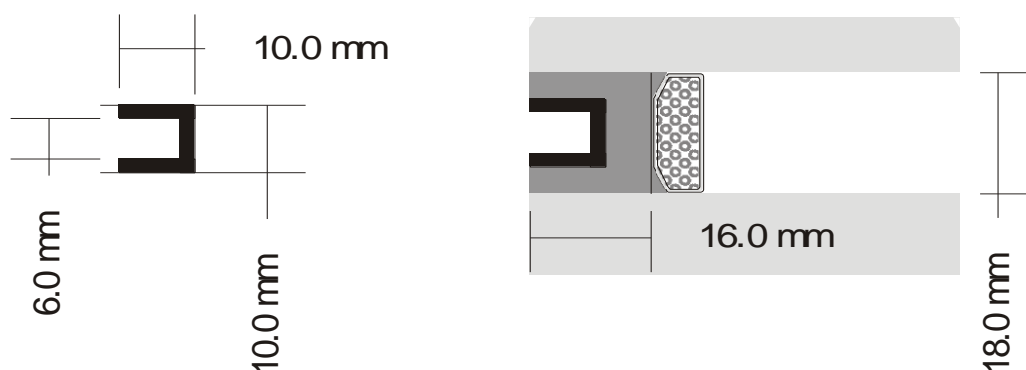
Structural Sealant Glazing applications pursuant to *ETAG 002* require load-bearing bonds. To this end, proper adhesion must be ensured via suitable deletion near the edge bond to produce a durable glazing structure. This is why the edge areas should always be masked off prior to coating and we recommend that customers specify this when placing orders. Sufficient load-bearing capacity must otherwise be explicitly verified e.g. as part of an *Allgemeine bauaufsichtliche Zulassung* (general technical approval) issued by the German DIBt. The outward facing edges of the panes can also be masked off to ensure long-term adhesion of the silicone weather strip.

Channel section in edge seal

Channel sections made from aluminum or stainless steel can be glued into the edge seal of structural sealant glazing, therefore allowing additional mechanical attachment of the insulation glazing. The insulating glazing element itself only represents part of the SSG system, therefore the number, type and position of the sections must be specified by the customer in accordance with the particular requirements. Also, the customer must ensure that the complete SSG system complies with all applicable legislation, regulations, standards and recognized rules of technology.

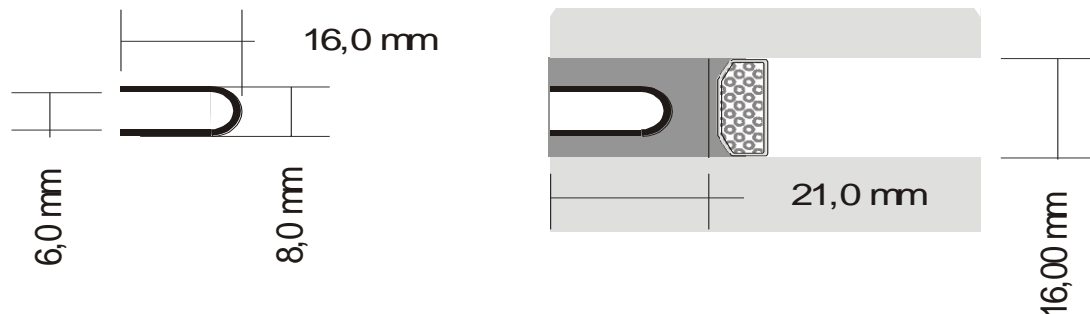
1. Aluminum channel section

- Min. gap 18 mm
- Min. gap width 16 mm
- Outside pane: edge trimmed all round
- Length of the section: either 100 mm / 200 mm or continuous
- Distance from corner areas min. 100 mm
- Arrangement and number of sections depending on the pane dimensions, type of glass and physical loadings – configuration and calculation subject to consultation
- Calculation as for SG glazing (comply with national regulations)



2. Stainless steel channel section

- Min. gap 16 mm
- Min. gap width 21 mm
- Outside pane: edge trimmed all round
- Length of the section: either 100 mm / 200 mm or continuous
- Distance from corner areas min. 100 mm
- Arrangement and number of sections depending on the pane dimensions, type of glass and physical loadings – configuration and calculation subject to consultation
- Calculation as for SG glazing (comply with national regulations)



Other printed matter

If you do not have the following printer matter, please request it directly from OKALUX or download it from the Internet at www.okalux.com:

General terms and conditions of business
Product-specific information texts

As well as these, there are the following customer notes:

Customer notes on offers
Customer notes on delivery
Customer notes alarm glass
Customer notes screen printing
Customer notes Structural Glazing / Edge deletion
Customer notes on heat-soak test
Customer notes on glazing
Customer notes SIGNAPUR®
Customer notes OKAWOOD tolerances
Cleaning instructions for OKALUX gen.
Cleaning instructions OKACOLOR
Guideline for visual quality