



Butyl reaching into the cavity of IGU's

In some cases, the Butyl along the edge seal of IGU's (insulating glass units) reaches into the cavity space between the panes of glass and the spacer bar. This mostly occurs after glass units have been installed.



Image 01: Butyl reaching into the cavity

The Causes of this phenomenon can be:

- high temperatures in the fold area
- Too much contact pressure on the edge area of the glazing

Comparative tests by the Bundesverband Flachglas (BF) have shown that butyl spilling into the cavity of IGU units installed in Windows and Facades has a purely visual effect and has no consequence to the durability of the IGU unit. The study was carried out with standard triple glazed units.

It was found that a butyl overspill of up to 3mm into the cavity doesn't affect the durability and functionality of the glass and is therefore not justification reclamations. (result of the BF- Study)

Based on the results of the study, are the following recommendations are provided:

- Butyl reaching into the cavity is less noticeable if the window/frame rebate is increased within the permissible range (see DIN 18545).
- Recommended minimum butyl quantities as per the following table.

The amount mentioned here is recommended so that the durability of the IGU will not be affected.

| Butyl density g/m ³ | Recommended minimum butyl quantity g/m per spacer bar side |
|--------------------------------|--|
| 1,05 to 1,09 | 2,5 |
| 1,10 to 1,15 | 2,7 |
| 1,16 to 1,20 | 2,9 |
| 1,21 to 1,25 | 3,1 |

Table 01: Recommended minimum butyl quantity

System-related specifications must be observed.