



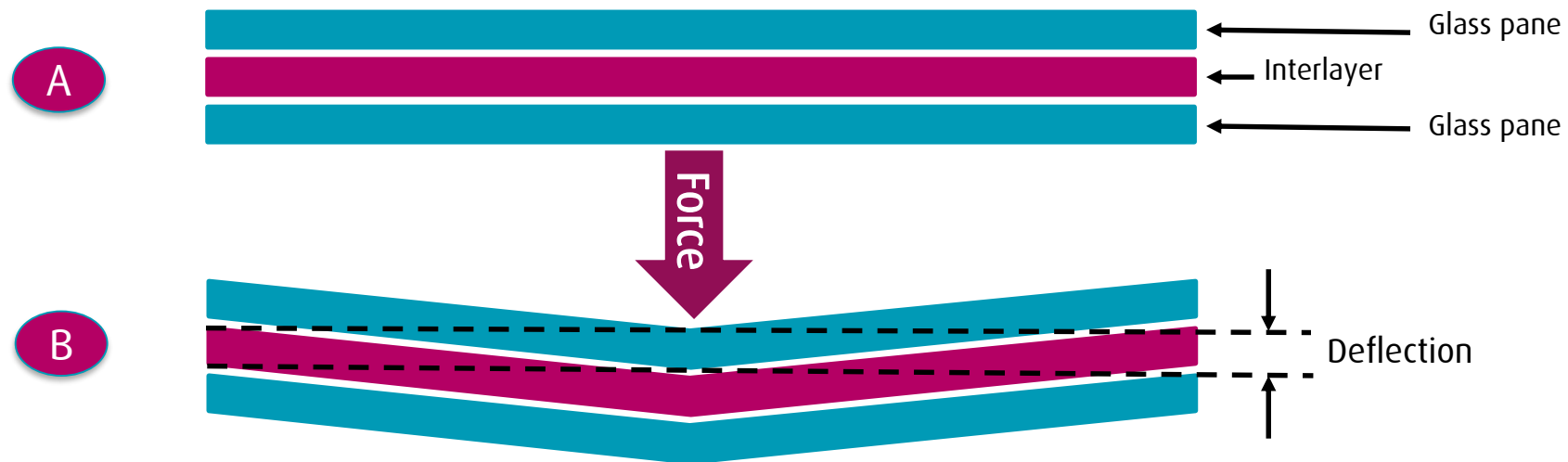
DESIGNED,
DEVELOPED
AND MADE
IN GERMANY



evguard[®] laminating film
Shear modulus












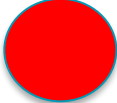


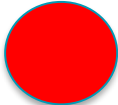
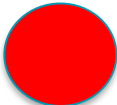
Description

Shear strength is important for the safety properties of laminated safety glass under the effect of environmental conditions like wind, snow and temperature. It is therefore required for the architectural designers to find out the optimum glass construction for the architectural glazings, facade engineering and construction of buildings.



By putting a force (166 N) on a laminated safety glass sample at certain temperatures, the deflection (displacement of the sample) is measured over time. By measuring and correlating the deflection at the glass construction, the shear modulus is calculated.

Shear modulus in dependence of time at different temperatures*

	30 °C	40 °C	50 °C	60 °C
evguard®				
SGP				
PVB				
Stiff-PVB				

*Specimen evguard® FL 44.1 / Specimen PVB 66.2 / test was carried out according prEN 16613

Conclusion



evguard[®] laminating film provides low deflection and high shear modulus. Thus, for architectural calculations, overall laminate thicknesses can be reduced significantly resulting in savings. evguard[®] laminating film offers safety properties in a broad temperature range, not only at room temperature but also at temperatures above 50 °C, which PVB materials cannot achieve. These properties bring new possibilities in open edge applications since there is no need for frames anymore.

