extreme supporting structures
exhibits at BAU 2019
limitless transparency
up to 3.51m x 20m

Ever more architectural milestones are not out of stone but of glass. Because there are brilliant architects who creatively exhaust the possibilities with their designs. And because the glass specialist sedak® dedicates itself to them as innovator and companion.

Alongside visionary architects, we work for puristic and uncompromising solutions.

This year, we focus on extreme supporting structures resulting from the technological lead of the glass manufacturer. They demonstrate the structural masterpieces glass can form. Together with the world’s unique dimensions, they allow for maximum transparency for glass façades and roofs.
exhibits at BAU 2019

Extreme glass dimensions, structural glass components, and new developments thematically shape sedak’s trade show appearance. Four exhibits testify to the innovative strength and the product quality of the leading glass manufacturer for oversize and special glass.
1 – Glass fin
2 – Glass seesaw
3 – Balustrade, glass fin detail
4 – Façade units, wavelike
Glass no longer needs to be supported within the façade but can be used as supporting structure. That shows a filigree glass fin construction which traverses the booth and proves the company’s knowhow of handling oversize glass. Only two 30 cm long stainless steel arms hold the 1.6 tons heavy exhibit. Those arms have a diameter of just 38 mm and were laminated in between the glass fin layers.

Glass fins are installed as supporting elements with minimum metal connection parts for all-glass facades and roofs. Noteworthy is not only the length of the exhibit but also the extreme aspect ratio of 1:33.

**Built up**

5 layer laminate with inserts (holding function) laminated in between the glass layers
5 x 10 mm Optiwhite™ (heat-strengthened) with 1.52 mm SentryGlas® interlayer

l: 20 m | w: 60 cm | weight: 1.6 t
A completely transparent seesaw shows how resilient glass is. The 10 m long component balances on a perspex rod.

The 0.6 t heavy 11 layer laminate easily moves on its own central axis and stands for the extraordinary bearing capacity of glass. Each side can be loaded with 150 kg.

The exhibit was created together with Eckersley O’Callaghan.

**Built up**

**Foot:** 10 layer laminate out of 10 mm Optiwhite™ with 0.89 mm SentryGlas® interlayer

**Board:** 11 layer laminate out of 10 mm Optiwhite™ with 0.89 mm SentryGlas® interlayer

l: 10 m | w: 40 cm | weight: 600 kg
sedak clear-edge® is an innovative completion for open edges of glass laminates used e.g. for balustrades or structural glass components. The laminated-on glass-edge protection sets aesthetic accents and is functional: The open glass edge of the laminate is protected against weather effects. Additionally, sedak clear-edge® works as protection against impact which enabled double laminates to be used where, until now, triple laminates have had to be installed due to building regulations.

**Built up Balustrade**

Double laminate out of 8 mm Optiwhite™ with 1.52 mm SentryGlas® interlayer

l: 2,500 mm | h: 1,100 mm

Glass-edge protection:  
l: 2,500 mm  
w: 17.5 mm | h: 6 mm

**Built up Glass Fin Detail**

4 layer laminate out of 10 mm Optiwhite™ with 0.89 mm SentryGlas® interlayer

2 glass-edge protections:  
l: 1,100 mm and 307 mm  
w: 42.7 mm | h: 6 mm
The demand for bent glass is rising. Bent glass offers elegance and energy for every room. Due to ever fancier architectural designs, also requirements of bent glass and its quality increase.

To bend glass, there are different techniques being improved permanently thanks to research and development. Besides cold-bending during lamination that has been perfected by sedak®, hot bending has recently also become one of sedak’s capabilities. For that technique, the glass is heated to the melting point which allows for extreme radii.

The exhibit shows a part of a hot bent glass façade.

**Built up**
2 double laminates, hot bent, out of 10 mm float glass with 1.52 mm SentryGlas® interlayer

h: 5 m | w: each 1.35 m
sedak isopure® –
more transparency for IGU joints

Modern lamination techniques and glass dimensions up to 20 m allow for a nearly jointless appearance of extensive all-glass façades and roofs. Until now, that appearance could only be realized with laminated safety glass. A new sedak® development makes that possible also for IGUs.

By using transparent spacers, sedak® creates an almost interruption-free overall appearance with modern energy values at the same time. That detail development lets the joint disappear visually and thus, increases the transparency of the glass façade.

The transparent spacer is used for the two visual edges of a glass unit. The joint of two units is formed by two glass spacers and therefore disappears visually. For the two joints not visible after being installed into a holding construction, a normal IGU spacer is used to keep the cavity dry.