Multifaceted interplay: the optics of fluted glass

Finely cut

Panes of glass with grooves create a dynamic visual impression that changes according to the viewing angle and the incident light. sedak now realizes these fascinating optics by cutting the grooves into float glass. The big advantage: the new production process allows numerous design options. In comparison with conventional casting or pressing production methods the glass thereby obtains an unusual brilliance. In addition, these lively glass panes with their highly precise structure can be further processed into insulated glass or safety glass. Fluted glass, with its characteristic look, opens up a broad spectrum of applications and provides an optical highlight on façades or as a striking room divider functioning as a sightscreen.

With its new production competence in fluted glass, sedak once again demonstrates the multifaceted nature of the building material glass. The grooved panes cut from float glass have a high level of brilliance; the cutting of the grooves is absolutely precise – vertically, horizontally or diagonally, in V or C form and with a freely selectable distance between them. The glass thus becomes an optical highlight on the façade or in the interior – up to a maximum size of 3.6 x 20 meters. It is also is
temperable, so laminates, insulated glass and safety glass for façades can be realized with the new optics.

Enchanting reflections are created when rays of light are refracted by the flutes in the glass, quickly putting the observer under the spell of the three-dimensional glass surface. The proportions and the orientation of the grooves provide a tantalizing interplay with the light and a fascinating relationship develops between viewing angle, daylight, artificial light and glass: like an exquisitely cut diamond, fluted glass sometimes displays clear light, sometimes colors or reflections. The appearance changes constantly and invites playful discovery: static architecture becomes lively design that can be actively experienced.

The first projects with oversized fluted glass have already been realized by sedak in Canada and the Middle East.
Vertical, horizontal or diagonal, with grooves in V or C form – fluted glass always provides multifaceted optics: an interplay between the glass and the illumination, which changes depending on the viewing angle and the incident light.

Picture: sedak
Whether as a design highlight in the interior or as large-area façade glass – the light rays are playfully refracted by the grooves in the glass. This charming form of transparency creates a symbiosis between light, shadow and translucence. The fluted glass is also available curved.

*Picture: sedak*

The precisely cut grooves give the glass panes a unique liveliness, from sedak in maximum dimensions of 3.6 x 20 meters.

*Picture: sedak*
Leading glass

Since its founding in 2007, Germany-based company sedak has used its pioneering spirit to establish itself as a premium manufacturer of large-format insulated and safety glass. sedak has evolved their glass as a construction material for all-glass facades and roofs. Iconic facades and buildings are created with an unprecedented degree of transparency thanks to superior quality of innovative products.

sedak manufactures single-pane glass units, multi-layer glazing and functional insulated glass units in formats up to 3.6 x 20 meters in an efficient, highly automated system. Raw glass is treated, strengthened, laminated, printed, lamination-curved and assembled into insulated glass with a unique set of machinery that spreads over a production area measuring 35,000 qm. Since integrating Italian-based Sunglass Industry srl, who are the specialist in curved glass, sedak’s core expertise also now includes hot bending glass. The specialist also supplies exceptional solutions for luxury yachts with optimized glass for use on the high seas.

The glass fabricator particularly demonstrates its solution-oriented expertise in special designs. Thanks to its research and development spirit, new technologies and the expertise of its 190 employees, sedak is constantly advancing innovations in glass finishing and sees itself as a partner to architects, developers, facade builders and metalwork companies. As a specialist in oversized and extremely heavy glass, the company develops future-oriented solutions to implement customers visions with a flexible approach. The glass fabricator acts as a full-service supplier – from the initial order to final delivery. sedak thus helps advance tomorrow’s visionary architecture today.
Exceptional reference projects provide proof of impressive expertise. These include: Lakhta Center, St. Petersburg / House of European History, Brussels / Faculty of Medicine, Montpellier / Torre Europa, Madrid / Iconsiam, Bangkok / Apple Park, Cupertino / Apple Cube, New York / Experimenta, Heilbronn / Numerous premium flagship stores.

Areas of use

- Glass facades
- Glass roofs
- Glass stairways
- Glass balustrades
- Yacht glazing
- Pool glazing
- Safety glazing
- All-glass structures
- Interior design
- Special designs