

A new dimension - The extra-large cero IV sliding window with structural glazing effect

Clear, minimalist shapes are one of the defining features of modern architecture. Architects and clients alike want light to be able to maximise its potential as a main player in the design. In order to achieve this, transparency levels within the property in question need to be as high as possible. For years now, incredibly slender frames and profiles have been pushing the limits of what is technically feasible in terms of structural requirements. The new, extra-large cero IV sliding window takes transparency to the next level – without compromising on functionality or aesthetics. For architecture full of light.

<u>Unparalleled slender design:</u> cero IV with minimalist sight lines

The new cero IV sliding system adds a unique selling point to the cero family: by reducing the vertical forend profile sight line to a minimum, Solarlux has created a structural glazing effect that makes the forend almost completely invisible. In addition to this, the cero IV comes with even greater transparency levels than ever before - the top and bottom sight lines on the panel profile are only 15 mm wide each. And while these minimalist sight lines offer a new dimension in terms of look and aesthetics, the system also retains the key benefits offered by other cero models, such as the glazing rebate ventilation that prevents condensation from building up inside the double glazing.





Vertical section

Horizontal section

Perfection in detail: cero IV - the latest addition to the cero series

<u>Structural glazing writ large -</u> <u>The new cero IV</u>

With the cero IV, Solarlux has created a sliding door system that can take even high-quality building projects to the next visual level. The system is made up of thermally insulated aluminium composite profiles with fibreglass-reinforced polyamide profiles to guarantee optimum thermal insulation. The vertical sections of the panel frames are made of stepped-edge glazing. Just like all of Solarlux's other cero systems, the cero IV complies with DIN 18545, the standardised German recommendations for double glazing. Controlled ventilation and pressure compensation in the glass rebate space prevent condensation from diffusing into the space between the double glazing (fogging up the glass). The optimised design channels the panel loads vertically into the running track profile of the floor track via the carriage built into in the panel frame. As such, the cero IV offers all the usual functional benefits of a cero system, plus one more besides: the appearance of a one-piece, extra-large glass front.



New: Concealed locking mechanism in the panel level

The cero IV's locking mechanism is housed in the panel level, making it invisible from the outside and allowing a smooth, uninterrupted flooring surface. This is made possible by a patented drive rod adapter, creating a locking mechanism that doesn't require the counterpieces to be flanged and bolted into place.

Flush frame, maximum glass surface area

In addition to the new panel profiles with sight lines of just 15 mm at the top and bottom, the cero IV also has a frame that can be set flush into the ceiling, so the generous glass area can take centre stage.



Zero-wear running tracks and track rollers

The thermally isolated sub-frame system is made up of identical all-round profile elements. A brush seal is fitted in each C-shaped profile cross-section to ensure effective sealing with the panels. The bottom frame profile with stainless steel running track profile and surface forms the floor track, which is available as an accessible version in accordance with DIN 18040-1/2. In combination with the running gear, this ensures low-wear and low-noise running even with individual panel weights of up to 1,000 kg.





Optimum thermal insulation thanks to plastic profiles

Fibreglass-reinforced plastics are used in the forend section of the cero IV, allowing it to achieve a U_w value >- 0.8 in line with passive house standards. This means that the cero IV offers top-class thermal insulation values in spite of its huge glass surfaces. The vertical sections of the panel frames are made of stepped-edge glazing. The outside pane almost completely covers the vertical panel profiles, making the glass front look completely transparent especially when it is made up of multiple panels.

Convenience down to the smallest detail



The controllers can be placed next to the motor, or in an accessible control cabinet.

Motorised drive with sophisticated control logic

In keeping with tradition, newest member of the cero family allows panels with a weight of up to 1,000 kg to be operated effortlessly and automatically by the user, even in properties with complex ground plans. The desired order for opening and closing the individual panels is programmed in advance, and the necessary controllers can be placed either next to the motor or in an accessible control cabinet.

All the opening and closing sequences can also be selected using a control panel or the building's own automation system. The control command is then executed as one fluid process, so the user doesn't need to keep the button pressed down the whole time. Fully automated operation uses laser scanners on the inside and outside.

cero IV quick check

- + Almost invisible forend section creates structural glazing effect
- + Optimised Uw values thanks to use of plastics in forend section
- + Locking mechanism integrated into panel level no need for flange-mounted lock counter-pieces
- + Concealed glazing rebate ventilation retained in design
- + Load still transferred via carriage in bottom panel profile
- + Bearing surface profile made of rounded stainless steel, clamped in place securely in running track profile
- + Floor track and system drainage accessible; no deep profile slots
- + Optional electric locking mechanism and/or electric drive for even greater ease of operation

