

cero by Solarlux

cero





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cero by Solarlux

cero opens up rooms using spacious glass panes: perfect transparency virtually blends the inside with the outside. The Solarlux brand can draw on more than 30 years of expertise as one of the leading manufacturers of folding glass doors and glass extensions: here precision, smart technical details, in-house production, on-site management and sophisticated designs exclusively “Made in Germany” are guaranteed. The maximal sliding door is continuously further developed by our own research and development team which also carries out comprehensive tests ensuring that both national and international standards of renowned testing institutes are easily met. Opting for cero means opting for quality, safety and expertise.

The System

Slimline frames and sections add to the spacious transparency of the individual panes. cero opens up a wealth of opportunities for both constructors and architects designing and building structures with a sophisticated design - yet, without compromising the company's high demands in product quality and engineering aims.



Creative freedom

- up to 4 metres wide or 6 meters high
- surface area up to 15 m²
- maximum panel weight up to 1000 kg

Visible profile width

- (with) uniform view of frame profile
- minimal 34 mm frame visible when horizontal and vertical base profiles are sunken into the fabric of the building

Profile thickness and floor track

- flush floortrack for wheelchair access according to DIN 18040
- depending on the number of tracks, different system profile thicknesses are used
 - single track depth: 91 mm
 - twin track depth: 197 mm
 - triple track depth: 303 mm

Runner mechanism

- stainless steel runners and tracks ensure easy sliding with little wear
- panel-integrated stainless steel rollers ensure an even spread of weight
- brush seals protect runner assembly from ingress of dirt
- power driven panels available as an option (see accessories for power drives)

Drainage

- controlled drainage of condensation concealed within the frame profile
- venting of glazing rebate to prevent condensation entering space between the glass panes and aluminium profile

Options

- cero I - uninsulated
 - for projects in warm climates such as the Mediterranean regions or as a partitioning wall
 - without thermal break
- cero II - thermally insulated
 - for enhanced structural requirements, e.g. due to wind loads
 - fitted with double glazed thermally toughened safety glass (ESG)
- cero III - highly thermally insulated
 - meets stringent requirements where particularly low U values are required
 - fitted with triple glazed, thermally toughened safety glass (ESG)

The Design Options

The cero system includes sliding, fixed and corner elements which offer a wealth of combinations. They have been developed to create a tremendous freedom of design and adaptability of layouts.



Glass

- depending on the chosen option, fitted with double or triple toughened safety glass (ESG)
- optional functional glass for intruder protection, impact and penetration resistance, noise control and self-cleaning glass

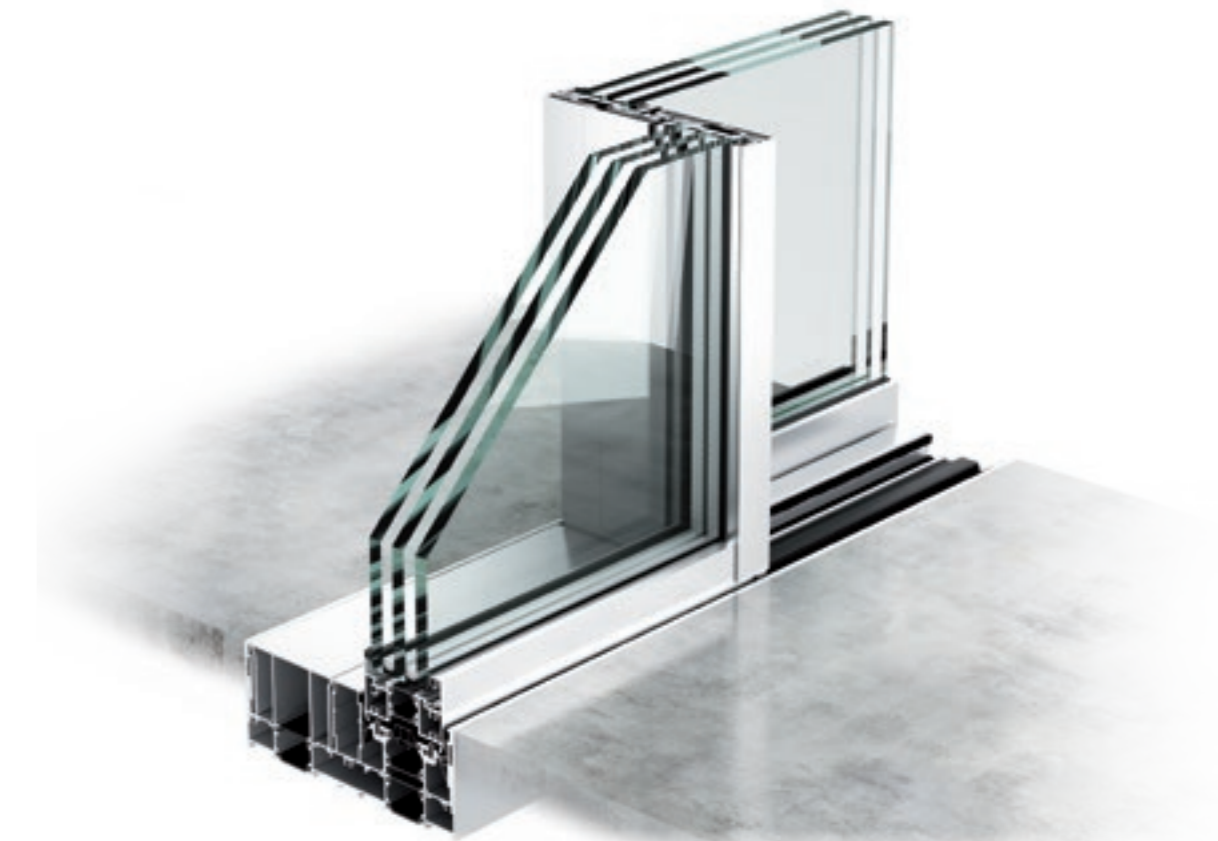
Handles

- standard grip rails extend to the full height of the panels.
Grip profile: 34 mm
- high grade brushed V4A steel designer grip rails for maximum corrosion protection

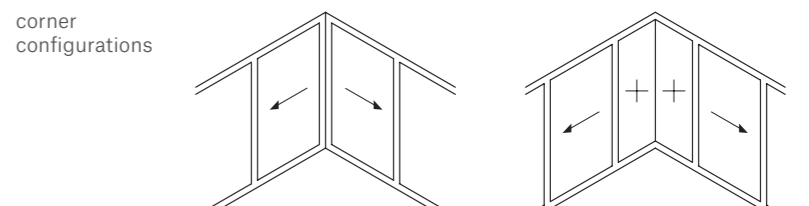
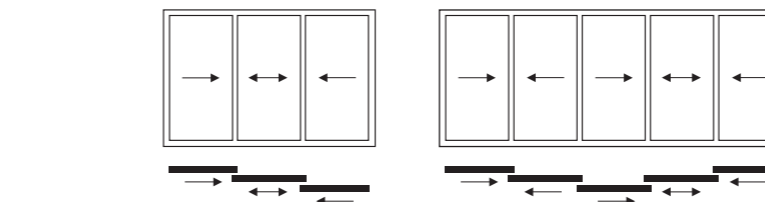
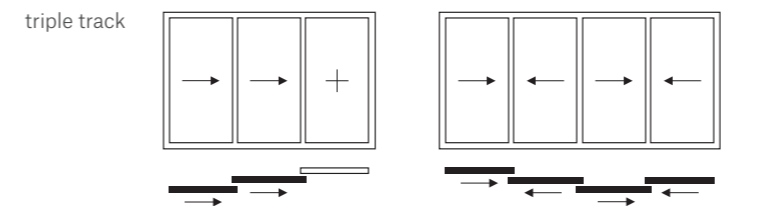
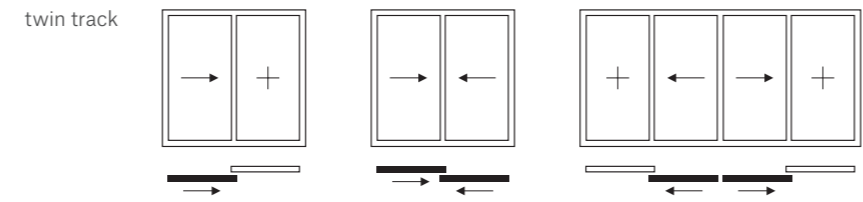
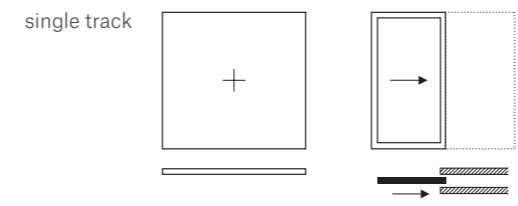
Colour

The colour options for cero are vast, including a huge range of different colours for both the interior and the exterior. Available colours are:

- powder coating to RAL or DB
- anodised aluminium to EURAS
- special colours available on request



Examples of configurations



The Properties

The cero system boasts as many features as there are areas of use. It is certified by a renowned, external testing institute and continuously improved and tested in-house to always meet the latest requirements and market developments.



Thermal Insulation

Thermal insulation values vary depending on the glass, system and configuration used in each individual application. For each individual project, thermal insulation figures can be calculated on request.

cero II

- double glazed with toughened safety glass (ESG)
- achieves U values up to 1,35 W/m²K
- glass thicknesses up to 36 mm

cero III

- triple glazed with toughened safety glass (ESG)
- achieves U values of 0,8 W/m²K meeting passive house standards of the passive house
- glass thicknesses up to 54 mm

CE marking and classification

Since the beginning of 2010 the CE marking of windows and doors is a legal requirement which forms the basis for standards of efficiency and function. Tests for air permeability, wind load and driving rain are incorporated.

cero II

- protection against driving rain class 9A
- air permeability up to class 4
- resistance to wind loads B4

cero III

- protection against driving rain class E750
- air permeability up to class 4
- resistance to wind loads B3

Safety First

If the character of a build is shaped by extremely large glass facades, quality and safety aspects come even more into focus. Decades of expertise in the handling of glass facades and the use of a certified product that is completely developed and manufactured „Made in Germany“, are the guarantees for highest safety standards from the planning phase right through to assembly.



Intruder protection

- cero II is certified to RC2 and cero III to RC3 standards
- 2 point lock with adjustable locking points and a throw of 24 mm into the top and bottom guide rails as standard
- connectivity to alarm systems, lock monitoring, signalling systems such as glass break sensors or position monitoring are available

Security

- optional electronic locking mechanism available
- additional magnetic lock monitoring (reed contact) optional
- glazed areas with integrated break glass detectors optional
- integration of entire cero system in existing master security systems

Planning and Execution

- consulting and support in the detailed planning provided by architects' consultants with product expertise
- experienced project managers on site
- one sole contact at Solarlux for all questions
- technical development and manufacture as well as delivery by Solarlux vehicles directly to the construction site
- assembly by Solarlux technicians using special cranes if necessary

Quality

- over 30 years of product experience in the field of glass facades and glass extensions
- global reputation through international projects
- in-house research and development department
- certified by independent testing institutes

Warranty

- immediate response to enquiries and for service cases
- service network
- conclusion of maintenance contracts possible
- spare parts guarantee

Excellent design

cero excels not only through both architectural and technical detail but also due to its superior quality of design that has already been acknowledged by several international panels and rewarded with renowned design awards.



Iconic Award

cero wins the Iconic Award „Best of Best“ in the category „facades“. The Iconic Award is the first neutral international architecture and design competition considering the interplay of the two fields of industry. Iconic Awards are judged by an independent panel of experts, rewarding visionary architecture, innovative products and sustainable communication from all fields of architecture, the construction and real estate business as well as the manufacturing industry in five main categories.

iF Gold Award

cero wins the iF Gold Award in the category „Building Technology“. The iF awards rank among the most prestigious design prizes worldwide. Over 20,000 annual entries from over 50 countries confirm its importance in an impressive way. In 2015 the highly-esteemed, international panel presented 75 iF Gold Awards for exceptional quality in design.

German Design Award

cero wins the German Design Award in the category „Building and Elements“. The German Design Award is the international premium prize of the German Design Council. Its aim: identifying, presenting and awarding unique design trends. For this reason high-end applications from the fields of product and communication design which are all trend-setting in the international design landscape are rewarded on an annual basis.



Service and Accessories

If you decide on a cero system, you also decide on service provided by Solarlux. This renowned company draws on many years of experience when it comes to the handling of large construction projects at both national and international level, professional project planning and management, a well-established fleet of our own vehicles and a fitting team that is highly-qualified for the complex installation process of large glass windows and doors.



Service

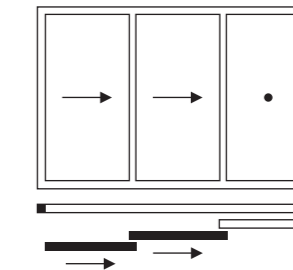
- assembly by experienced assembly teams
- competent commissioning of accessories directly by Solarlux
- on request, regular servicing intervals through maintenance contracts

Accessories

- integrated insect screens optional

Power drive

- powerful electric motor with quiet toothed belt drive
- dead man's (biased-off) switch as standard
- auto function optional
- complete automatic operation of sliding panels incl. electro-magnetic locking and unlocking
- operational sequence
 1. Operate push button to unlock.
 2. Move / open the sliding panel.
 3. Operate push button to close sliding panel.
 4. Once sliding panel is closed and locking element in correct position (magnetic lock monitoring), engage lock.
- by means of a control unit, several panels can be moved in relation to each other (optional)



power drive

System Overview

The decision for the best system option for your project is made in a personal meeting with one of our expert cero representatives. The resulting system overview shows you at one a glance the distinguishing key features of the individual systems.



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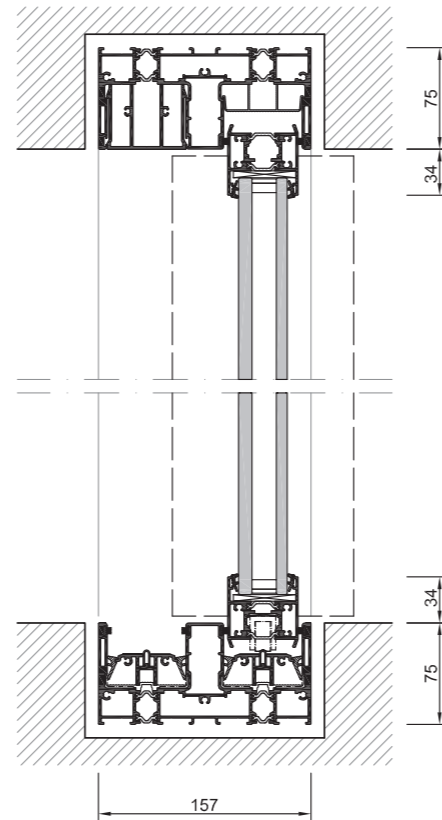
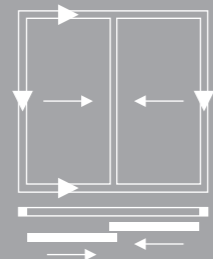
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	cero I	cero II	cero III
Sliding panels (max. width x max. height)	3 x 4 metres (max. panel size 12 m ²)	3 x 4 metres (max. panel size 12 m ²)	4 x 6 metres (max. panel size 15 m ²)
Fixed units (max. width x max. height)	3 x 4 metres (max. panel size 12 m ²)	3 x 4 metres (max. panel size 12 m ²)	4 x 6 metres (max. panel size 15 m ²)
Insulating glass (double glazing)	30–36 mm (ESG)	30–36 mm (ESG)	48–54 mm (ESG) / 50 mm standard
Daylight / proportion of glass	98 %	98 %	98 %
Runner mechanism	stainless steel runner assembly and runner track	stainless steel runner assembly and runner track	stainless steel runner assembly and runner track
Runner track / bottom profile	wheelchair access to DIN 18040	wheelchair access to DIN 18040	wheelchair access to DIN 18040
Panel weight	max. 600 kg	max. 600 kg	max. 1.000 kg
Visible profile width	34 mm all the way round	34 mm all the way round	34 mm all the way round
Frame height	0–75 mm	0–75 mm	0–79 mm
Thermal break	–	in frame and panel profile	in frame and panel profile
U value (glass U_g = 1.1 W/m²K)	–	U _w up to 1,35 W/m ² K	–
U value (glass U_g = 0.5 W/m²K)	–	–	U _w up to 0,76 W/m ² K
Protection against driving rain up to class	–	9A (EN 12 208 / EN 1027)	E750 (EN 12 208 / EN 1027)
Air permeability up to class ...	–	4 (EN 12 207 / EN 12 211)	4 (EN 12 207 / EN 12 211)
Resistance to wind loads up to ...	–	B4 (EN 12 210 / EN 1627)	B3 (EN 12 210 / EN 1627)

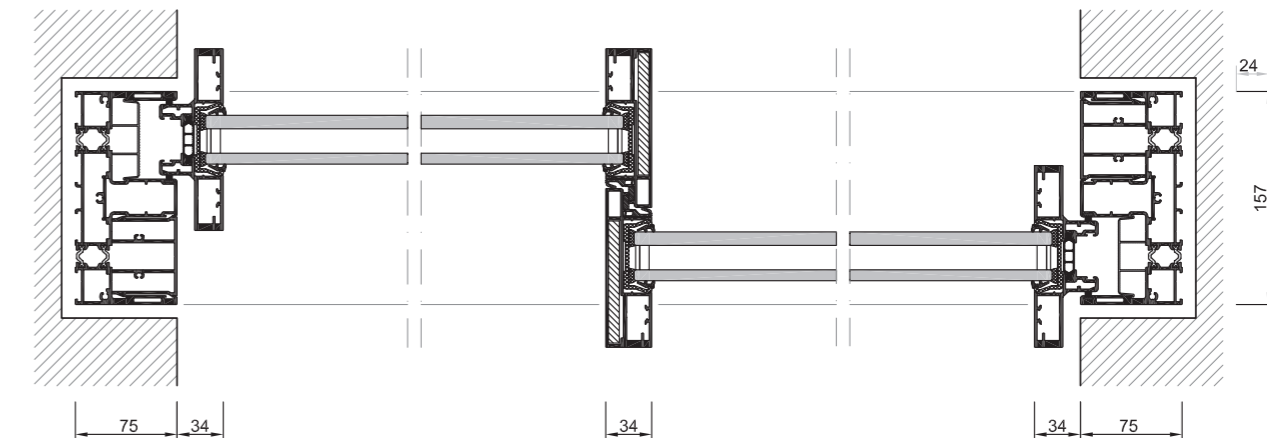
Detail sections zero II

zero II should be used for more stringent structural requirements e.g. due to wind loads; zero II is fitted with double glazed toughened safety glass (ESG) as standard.

example: twin track



vertical section | N.T.S.

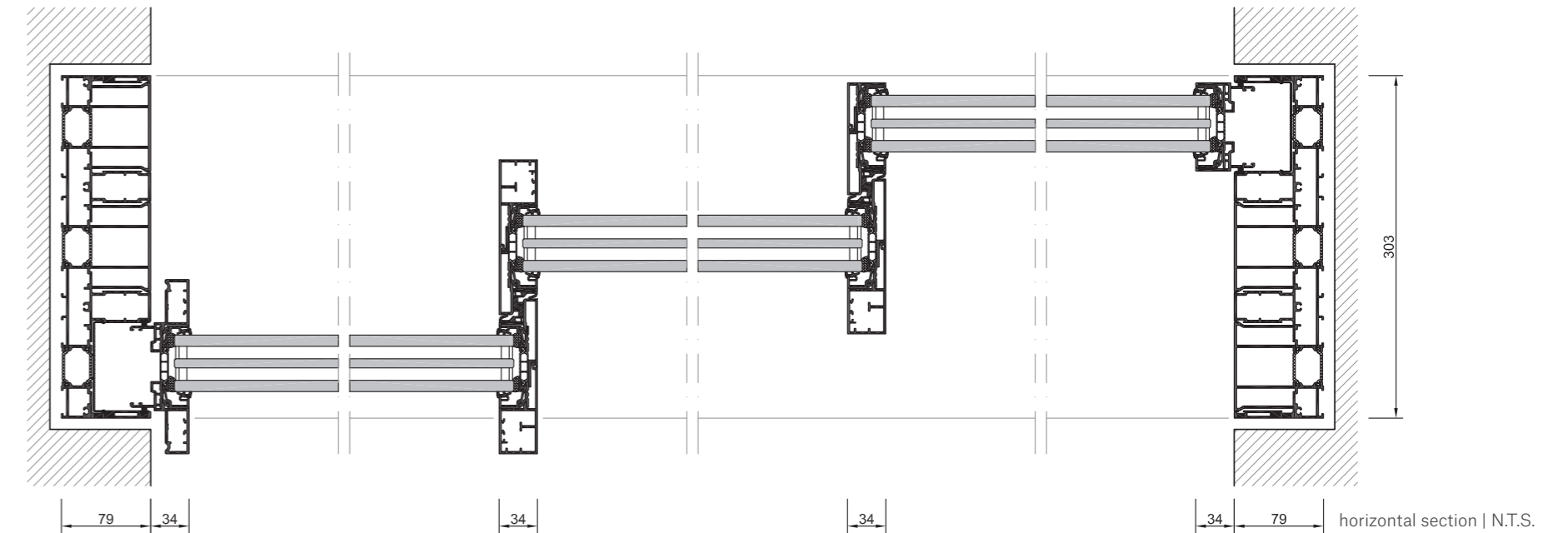
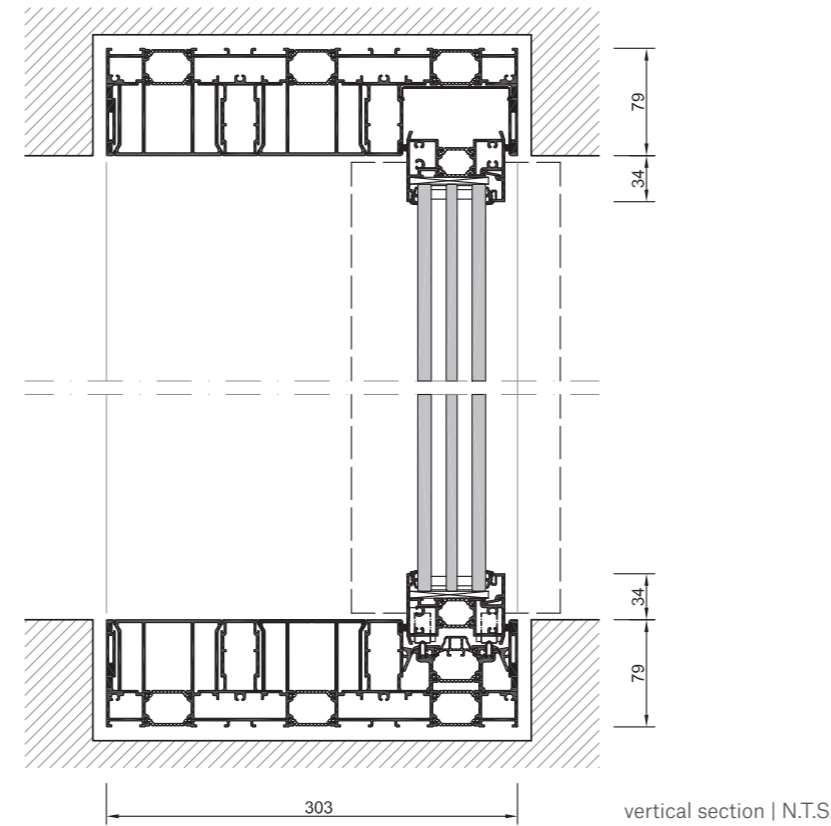
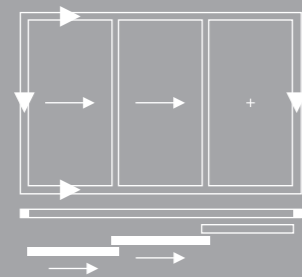


horizontal section | N.T.S.

cero III detail sections

cero III meets the demanding requirements for particularly low U_w values. Cero III is fitted with triple glazed toughened safety glass (ESG) as standard. In addition to a large number of standard solutions, a sliding corner configuration as well as an all-glass corner are possible.

example: triple track



References

The great diversity of projects implemented by us demonstrates the wealth of architectural options provided by cero. Just a small selection of public and private buildings clearly demonstrates the freedom of design that cero allows.

Renovated villa / Cologne

A family of three decided to completely refurbish a villa in Cologne and to adapt it to their individual needs. Their main wish: enjoying the intense effect of openness and space. The solution: fitting cero elements to kitchen, bathroom, bedroom and living room.

System | cero II

Architect | Benjamin von Pidoll

Photographer | Philip Kistner



New build / Zwolle

A couple in the Dutch city of Zwolle wanted both, to enjoy their garden with its old trees and provide plenty of space in the home for their children and grand-children. The solution is a light-flooded house with a maximal view and different areas inviting them to linger a while.

System | cero III

Architect | Boxis Architecten

Photographer | Danielle Malestein



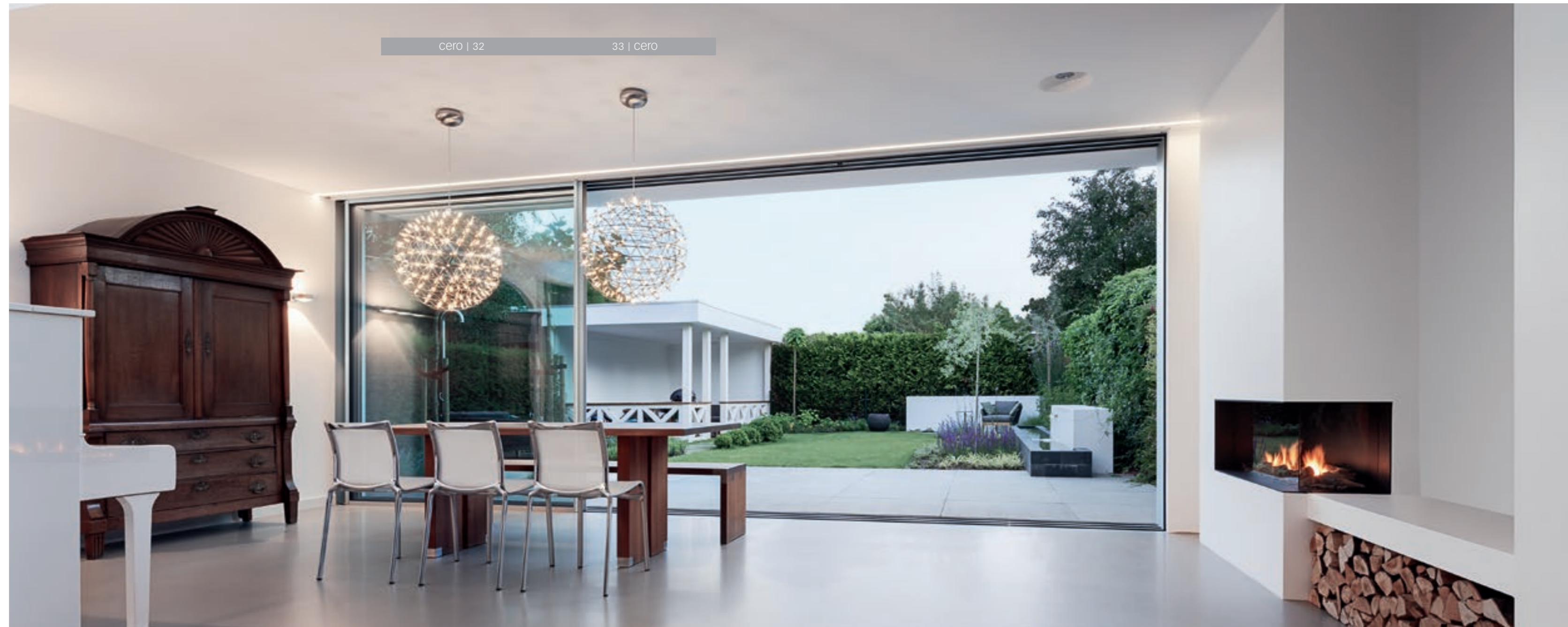
Extension | Den Haag

Too little space was the reason a family of four in The Hague decided to build an extension to their home. Their top priority: clear lines and flowing transitions between existing living space and the extension. Depending on customer-requirements, the three-panel cero system can be opened either to the left or to the right.

System | cero III

Design | Margreet Keijers

Photographer | Constantin Meyer



Reception building / Glatten

The reception building of the Schmalz company, designed and implemented in co-operation with Werner Sobek, extends the existing buildings to include a generous conference area, exhibition rooms, a customer meeting point, a canteen as well as modern work spaces for its staff. The architects designed a building with a spacious glass facade, open spaces and numerous light-flooded rooms.

System | cero II above balustrade

Architect | HaasCookZemrich

Photographer | Roland Halbe



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