



# New Features

Innovations and enhancements to  
Jansen steel systems in 2017





Palmkernölspeicher am Phönix, Berlin/DE  
Architect: naos baukultur, Berlin/DE  
(Janisol / Janisol Primo)



# Innovations and system enhancements

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- BIM (Building Information Modeling)
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- Machine control with JANIssoft

# New systems for new ideas

We are continuously developing new solutions and working on improvements to our existing products. This year we have innovations and system enhancements in store, which will bring the architect added value in terms of design freedom and the metal fabricator benefits in terms of fabrication.

The highlights for 2017 will include, among other things, the new **VISS Plus add-on construction**, which allows heavy glass loads and large spans to be implemented, while increasing process reliability and economic efficiency thanks to fabrication benefits.

The highly insulated **VISS roof glazing**, available in a standard or fire-resistant version, can be used for all types of glass roof solutions. Thanks to a limited number of components, the tried-and-tested system saves time and money.

With **Janisol Arte 2.0**, the proven Janisol Arte system has been further developed for renovations and modern residential projects. The metal fabricator benefits from a more simple and therefore more

economical fabrication process with the same quality and stability, while the architect is able to take advantage of a wider range of profiles, which has been extended to include additional sizes and the materials stainless steel and Corten steel.

The low-maintenance, high-performance **Janisol 2 EI30 anti-finger-trap door** with fire protection reliably fulfils all the requirements placed on buildings subject to frequent use. It has the same face width as the Janisol anti-finger-trap door without fire protection.

Available as a tested system for the first time, the **Jansen multi-functional door** meets all the demands of burglar resistance classes as well as the requirements

of emergency exit and escape route standards. The fittings are concealed and the locks are also available with a panic function. A design without a threshold is also possible.

With the integration of **BIM**, the further development of our design software **JANIssoft** and the corresponding interfaces to the machinery, we have also extended our range of services.

Our 2017 portfolio of new developments is rounded off with additional enhancements to the range; discover these over the following pages and do not hesitate to contact us if you have any questions or comments.



# VISS Plus

## Add-on construction

### Add-on constructions re-interpreted.

With the VISS Plus system enhancement, it is even easier to construct extraordinary façade and skylight solutions. The optimised steel system for innovative façade solutions offers maximum process reliability during design and fabrication.

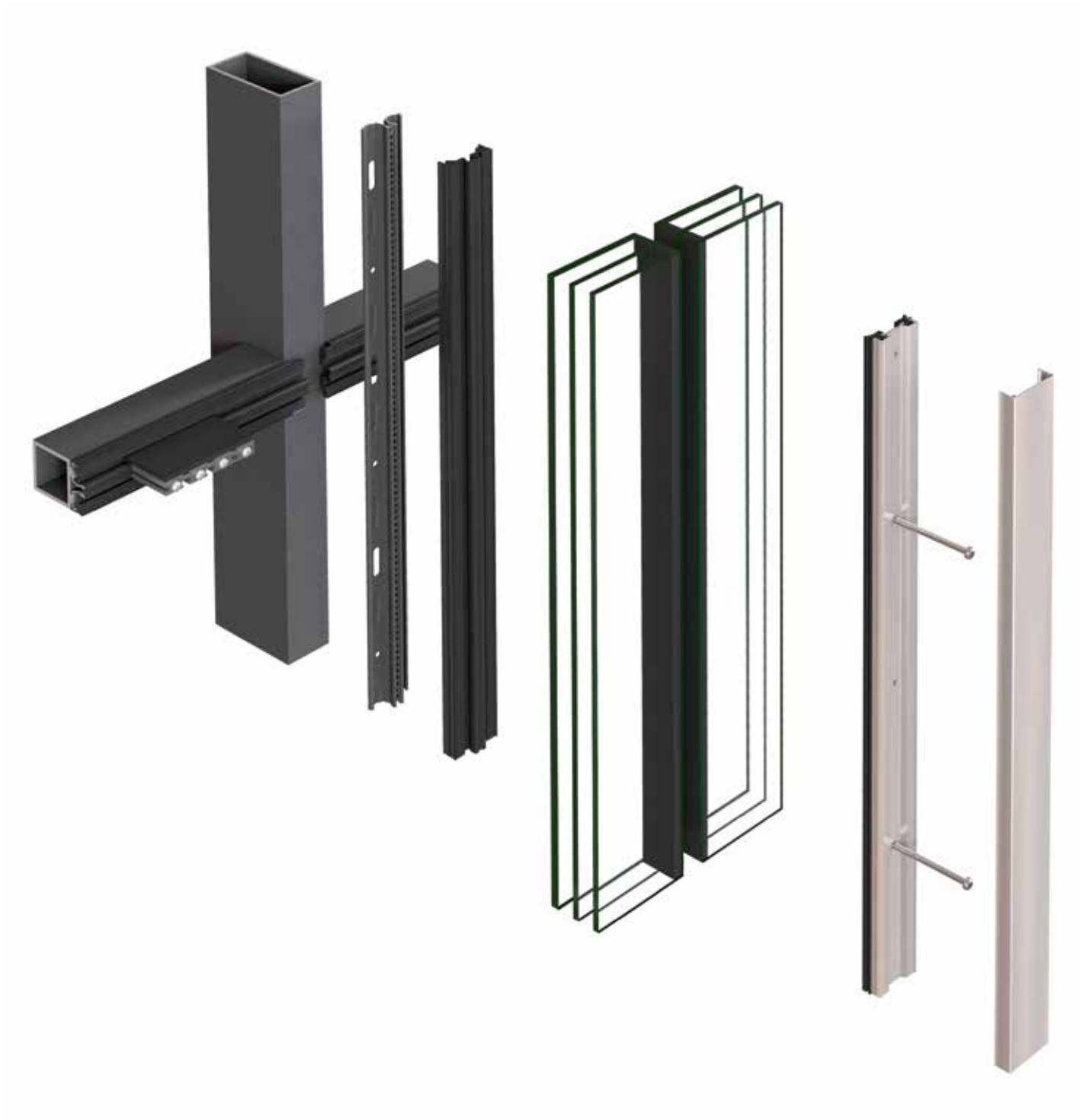
The steel system solution, which can be mounted on any support, comprises practical new features for architects and fabricators. In addition to a multifunctional basic profile for every application, these include innovative system components, such as standardised connecting spigots for all load-bearing profiles and a low weatherstrip height with three weatherstrip levels. The reduced number of system components ensures efficient design, fabrication and installation at every stage of the process. This guarantees fast construction with the best possible quality. The new VISS Plus add-on construction can be mounted on both steel and timber substructures. The façade system features a multifunctional basic profile and a small number of sophisticated system components as well as a range of fixing options. With the VISS Plus system innovation, Jansen is expanding the design freedom for custom steel façades, whilst also ensuring efficient and reliable fabrication.

#### Design benefits

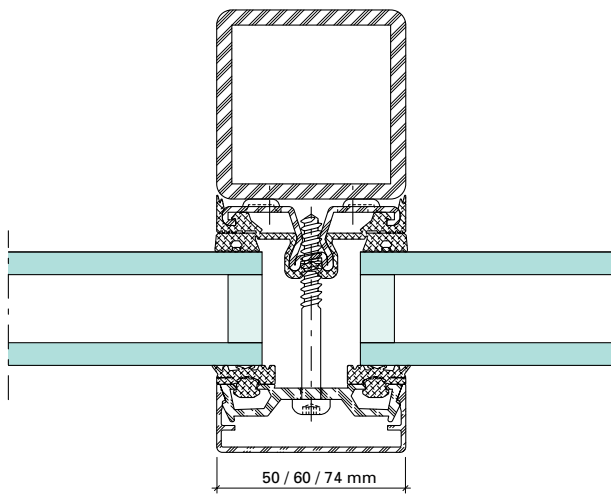
- Wide range of design solutions for aesthetically appealing architecture projects
- System solution which can be mounted on any support
- Innovative system components, such as standardised connecting spigots, guarantee efficient planning

#### Fabrication benefits

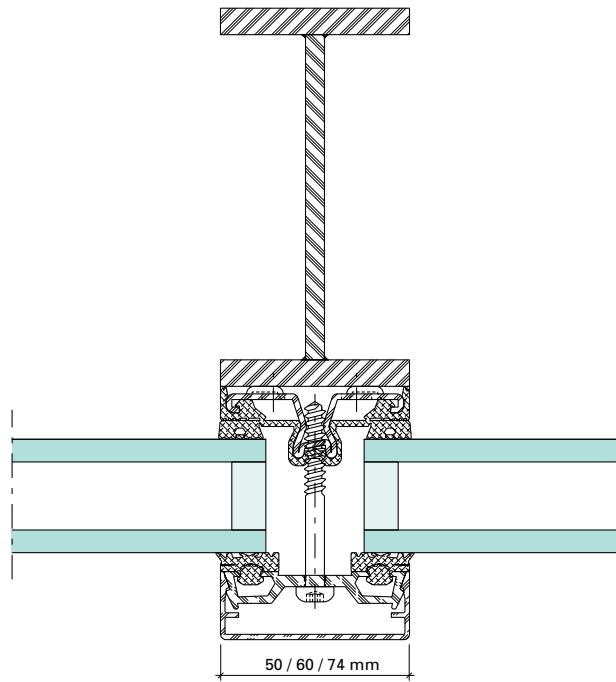
- A small number of components, simple fabrication
- Infill unit thicknesses up to 76 mm
- A high degree of process reliability during installation: e.g. due to controlled contact pressure with visual control
- Multifunctional basic profile for all applications with a range of options for fixing to the load-bearing profile: from welding and screw-fixing through to powder-actuated fastening
- Basic profile with optimum coatability: multi-point rear-ventilated profile ensures perfect, consistent distribution of the coating



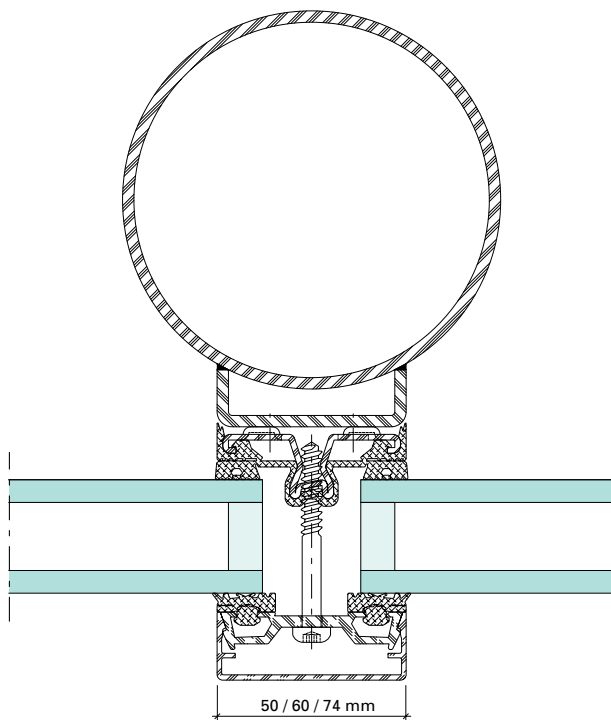
The substructures can be any shape and made from any material



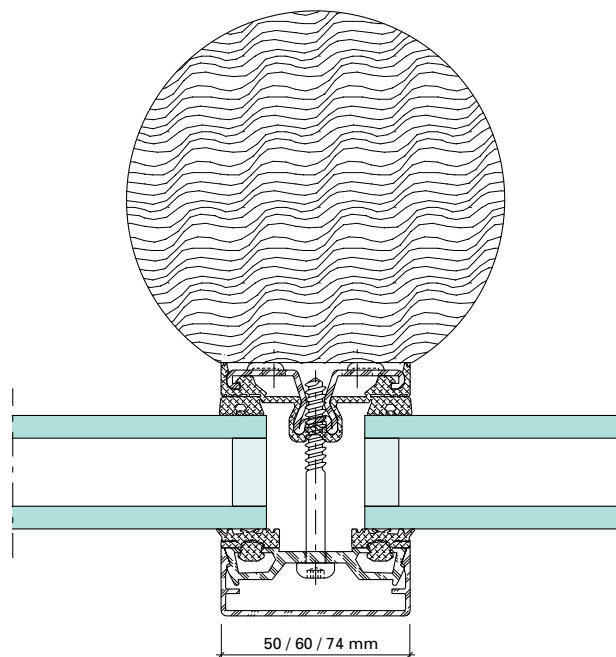
*Can be used on conventional steel profiles*



*Can be used on laser welded profiles*



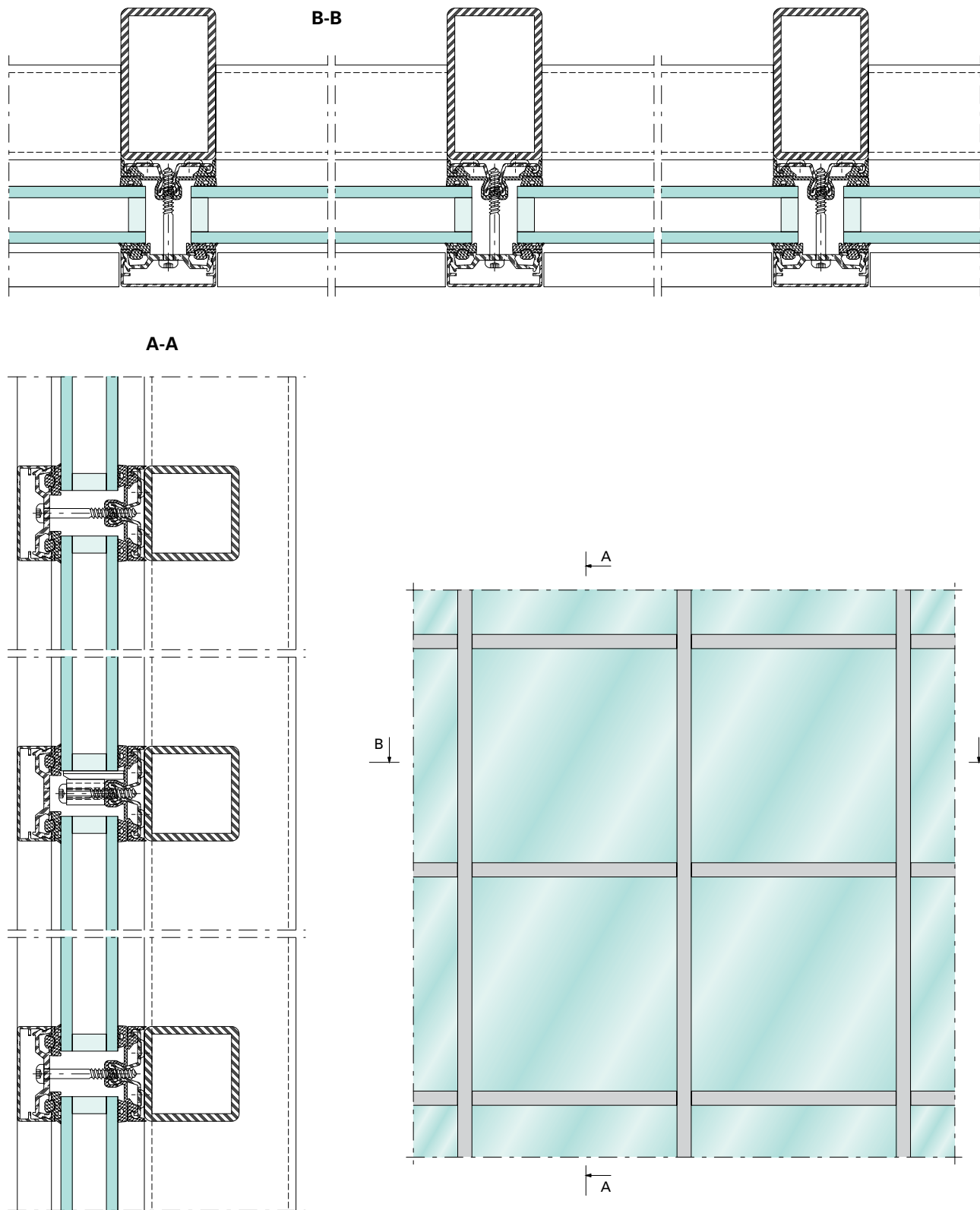
*Can be used on steel construction*



*Can be used on timber profiles*



Example of a VISS add-on construction



# VISS

## Roof glazing

VISS roof glazing: One solution. Two applications. So many possibilities.

With VISS roof glazing, a wide range of glass roof solutions can be constructed with a standard or fire-resistant design. Production of the highly stable steel constructions is based on a small number of system components – a cost-saving advantage for the design and fabrication. This means that, with only 4 supplementary articles, a standard glass roof can be transformed into a fire-resistant glass roof.

The system also boasts excellent performance values, for example, in the area of thermal insulation, where the highly insulated roof glazing system achieves outstanding  $U_f$  values. As a fire-resistant solution, the system also performs very well when it comes to residual strength in the event of a fire.

### Fire resistance classification

Due to the range of different fire resistance tests (in accordance with EN 13501-2), we are able to offer the following fire resistance classifications for a wide variety of skylight constructions.

- REI30
- REI45
- REI60
- REW30
- REW60

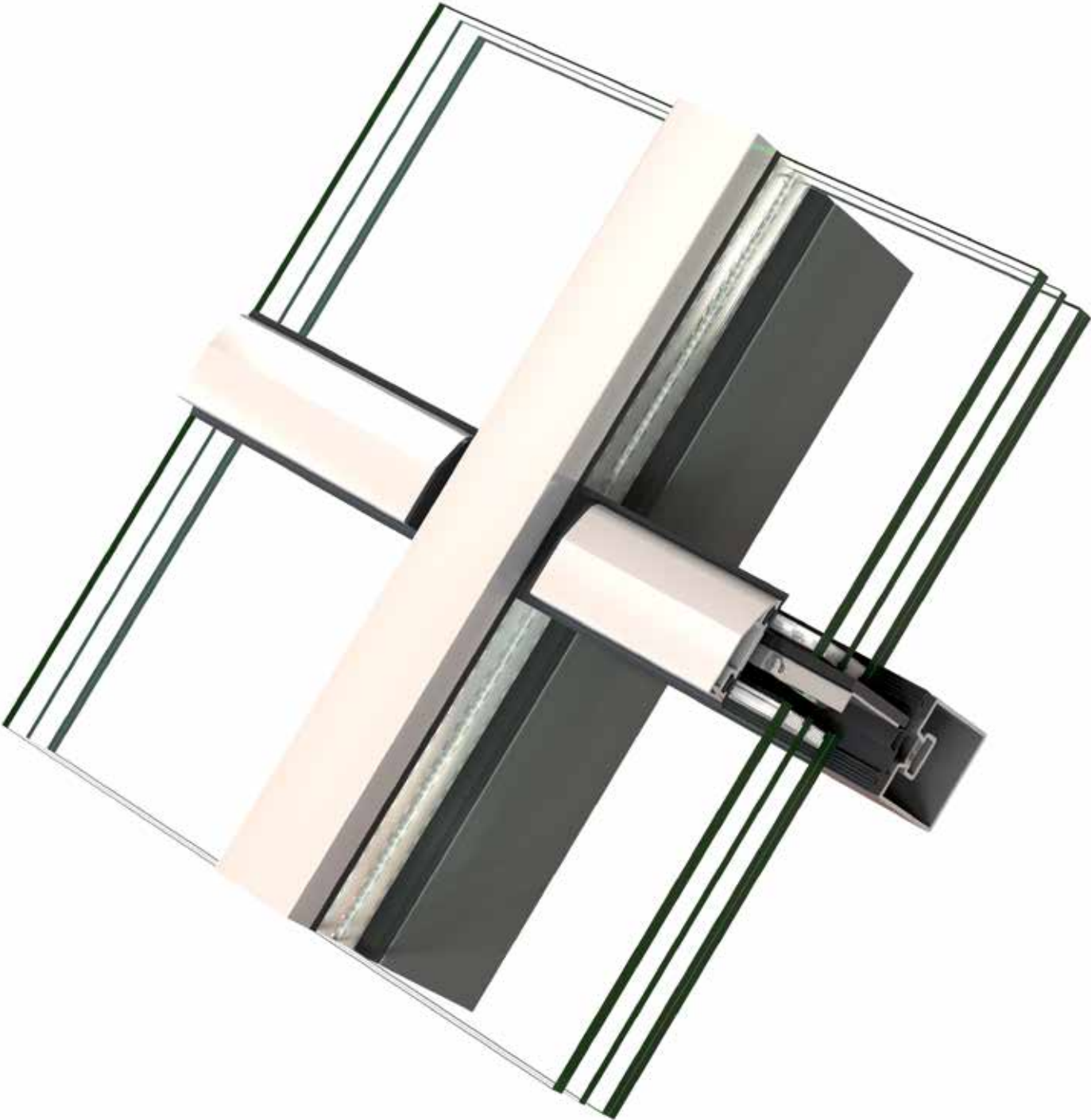
The fire resistance tests under initial load (signified by the R in front of the respective classification) mean that the corresponding load-bearing capacity is guaranteed even in the event of a fire.

### Design benefits

- A wide variety of options, such as flat roofs, pyramid roofs, saw-tooth roofs and hipped roofs, ensures a high level of planning reliability
- Maximum tested glass size for fire resistance: 1250 × 3050 mm
- Roof pitch of 10° to 80° for fire-resistant applications (0° to 80° in sheltered areas) with  $U_f$  values as low as 0.53 W/m<sup>2</sup>K
- Different brands of glass can be used for the fire protection option: with up to 4 glass manufacturers, project-specific requirements can be catered for perfectly.
- Watertightness of 1200 Pa at 3 litres m<sup>3</sup>/min.
- Resistance to wind load of 2000 Pa
- Air permeability of 750 Pa

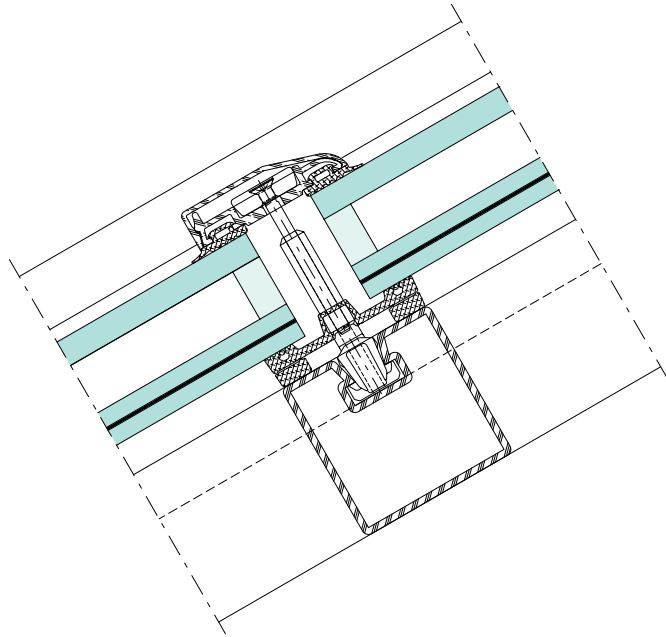
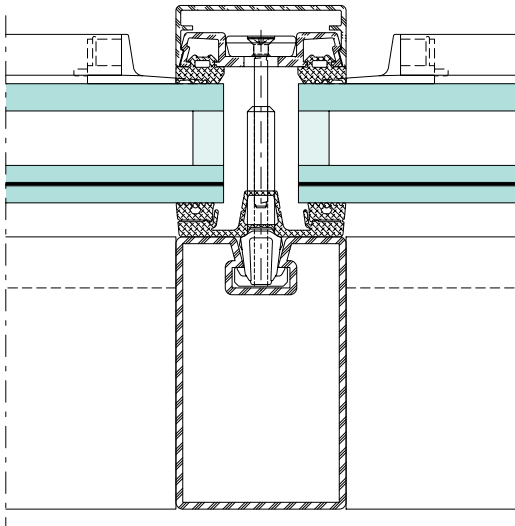
### Fabrication benefits

- Small number of components allows for innovative, detailed solutions
- Simple fabrication: optimised weatherstrips and intersection construction, and transom rebate profile not required
- Reduced range of articles for optimised storage



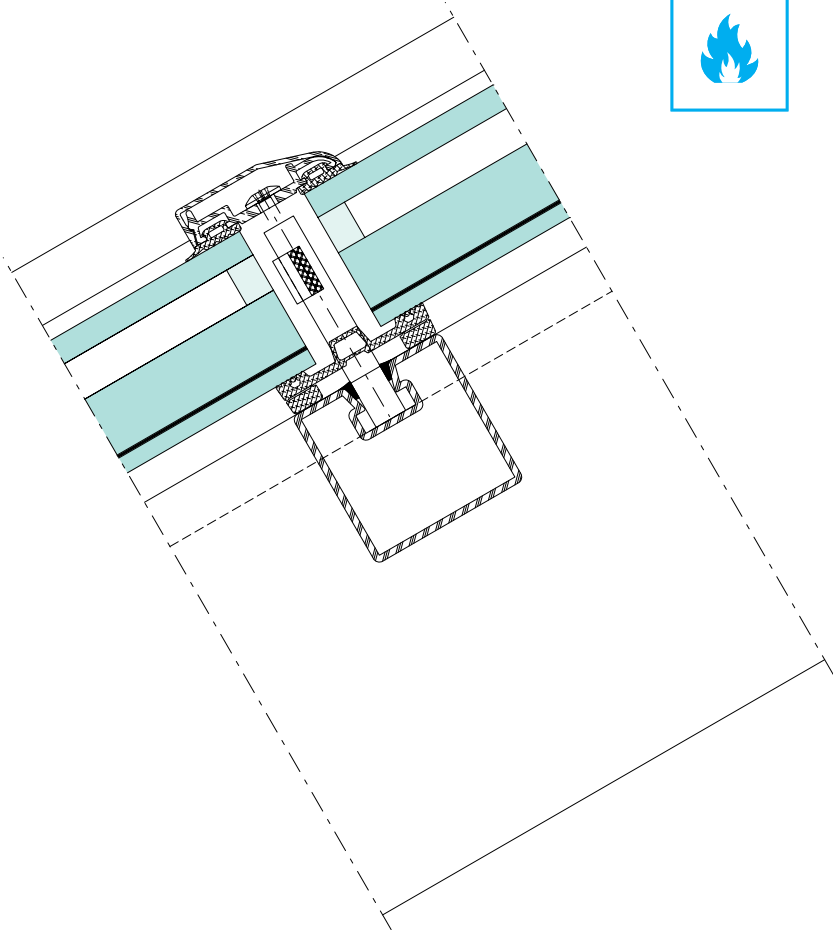
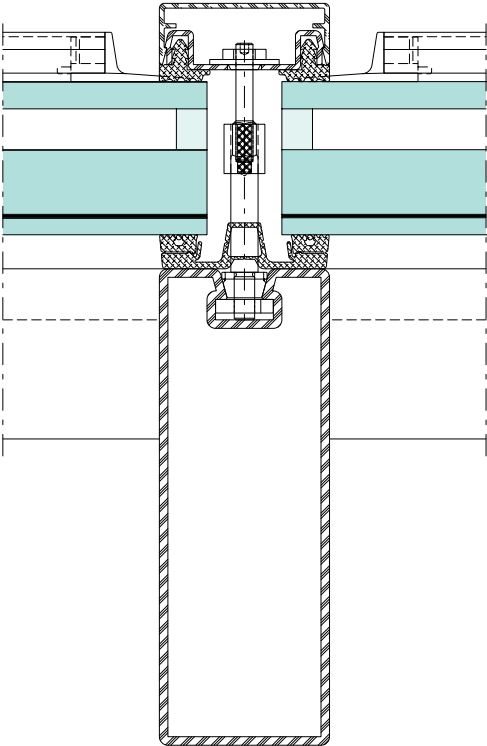


## VISS roof glazing

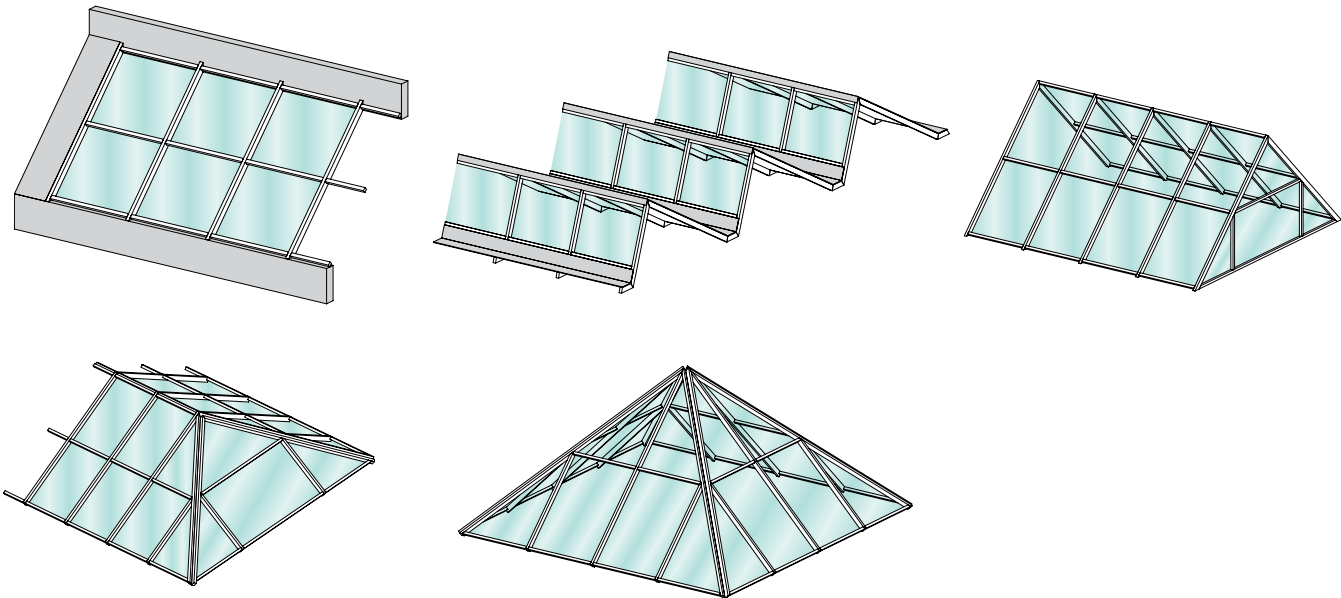


Copernicus Science Centre,  
Centrum Nauki Kopernik, Warsaw/PL  
(Architect: R&R-2 Laboratorium Architektury  
Jan Kubec, Ruda Śląska/PL)  
(VISS / VISS SG / VISS Fire / Janisol 2 EI30)

VISS fire-resistant roof glazing



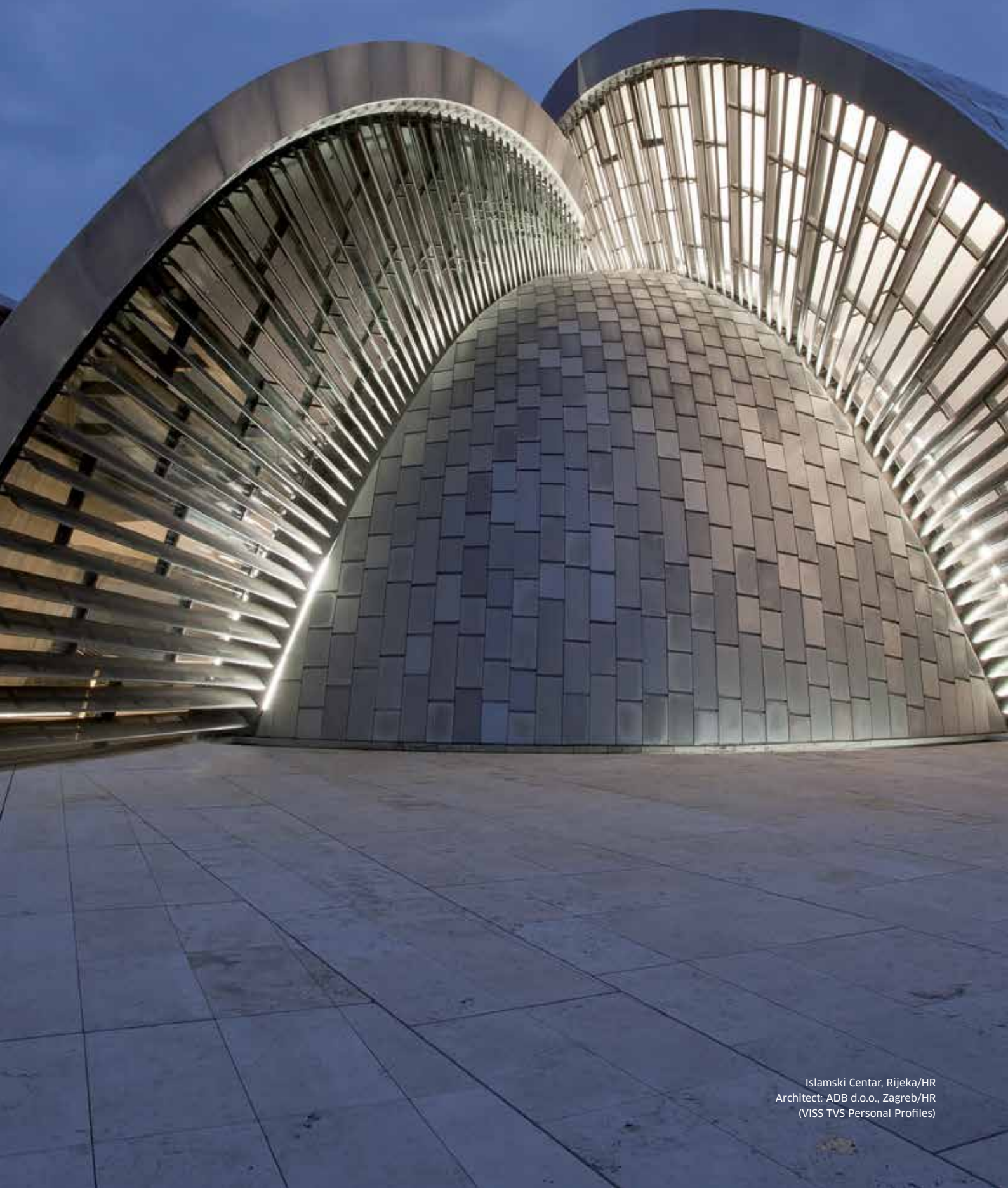
Wide range of options for fire-resistant roof glazing



An idea can  
show you a  
new way.

We can help  
your idea on  
its way.





# Janisol Arte 2.0

## The new generation



### Simplified fabrication; new materials for profiles

The second generation of the Janisol Arte window system now offers profiles made from stainless steel and Corten steel as well as a wide range of profiles. The integrated weatherstrip groove simplifies and speeds up fabrication. A large selection of glazing beads is also available in a variety of different materials.

The wide range of opening types is ideally suited for the renovation of old windows but also for modern residential construction. With the narrowest profile face widths of only 25 or 40 mm for fixed glazing and a basic depth of 60 mm, intricate yet stable constructions with a large proportion of glass and excellent thermal insulation can be created.

### Design benefits

- Inward and outward-opening fixed glazing/window vents
- Single and double-vent windows
- Inward-opening side-hung, bottom-hung and double-vent windows
- Outward-opening side-hung, top-hung, double-vent, horizontal pivot and projected top-hung windows
- Vent sizes of 1000 × 2400 mm
- Vent weight of up to 150 kg
- Unit thicknesses from 20 to 47 mm
- $U_w$  value from 0.8 W/m<sup>2</sup>K
- Multi-point window locking
- New materials for profiles: stainless steel and Corten

### Fabrication benefits

- Composite technology tested in accordance with EN 14024
- CE classification in accordance with EN 14351-1
- Optimum weldability of the profile frame due to the ZF surface finish
- Mechanical strength tested in accordance with EN 13115
- Impact resistance tested in accordance with EN 13049



*Janisol Arte 2.0*



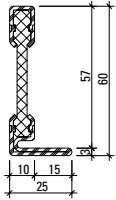
*Janisol Arte 2.0 stainless steel*



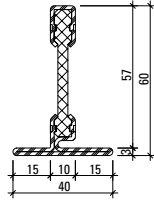
*Janisol Arte 2.0 Corten*



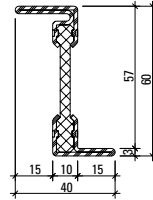
## Janisol Arte 2.0 profile range



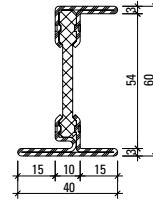
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601.611.09



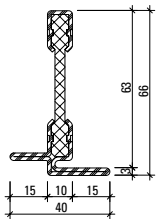
602.611 Z  
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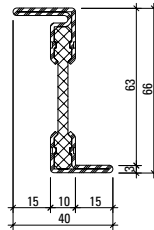
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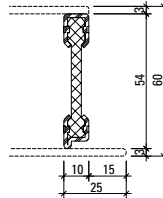
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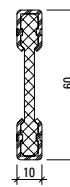
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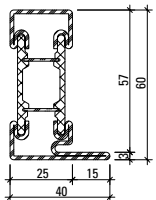
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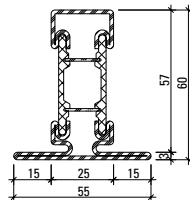
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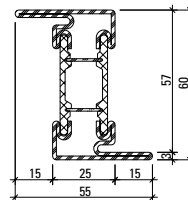
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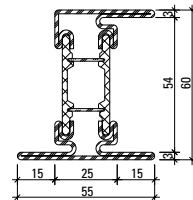
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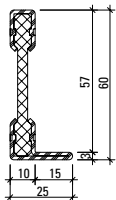
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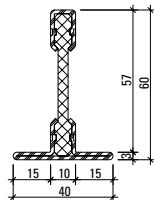
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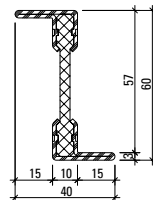
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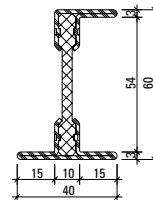
601.610  
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**Part no.**

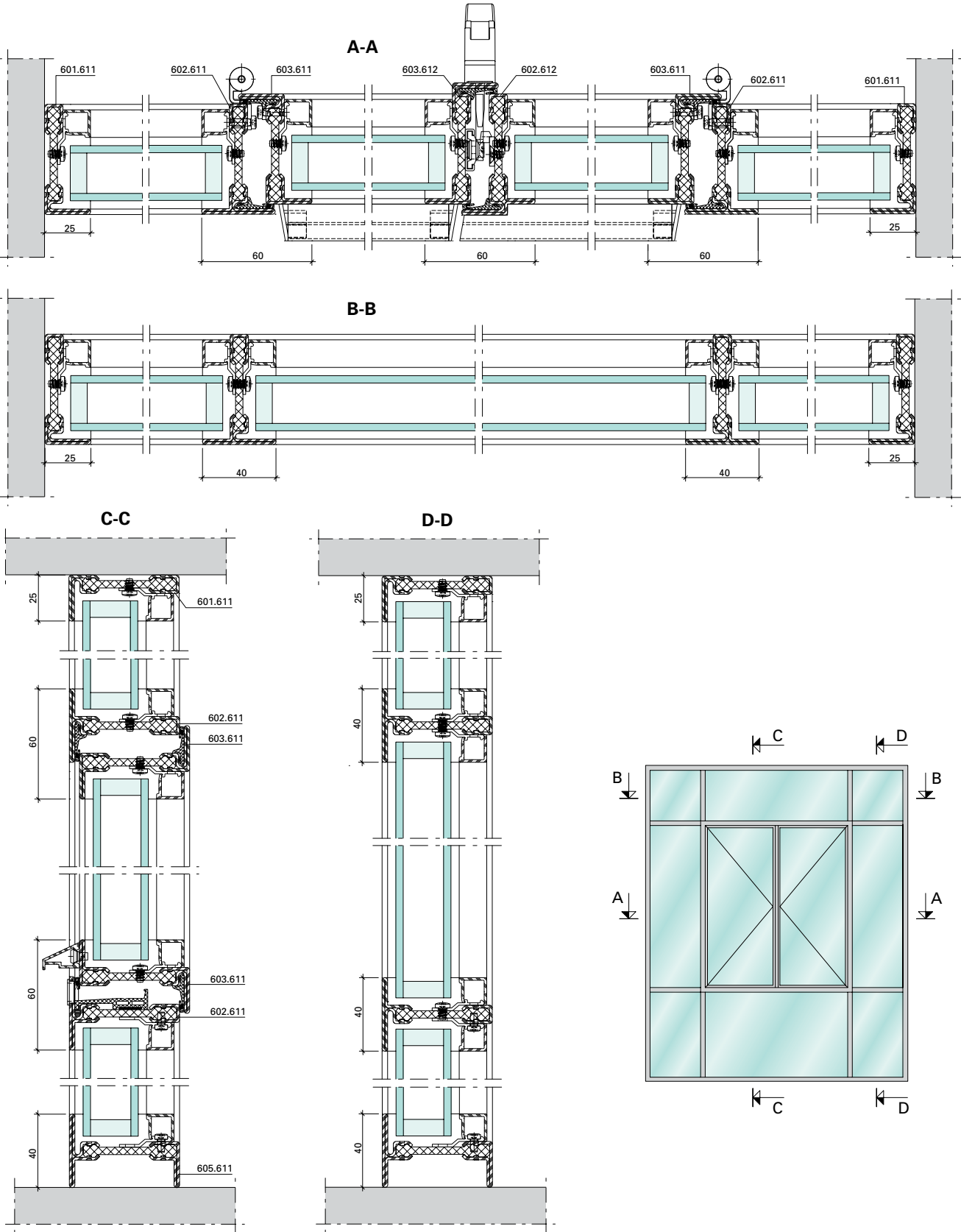
without addition = bright

with Z = hot-dip galvanised steel

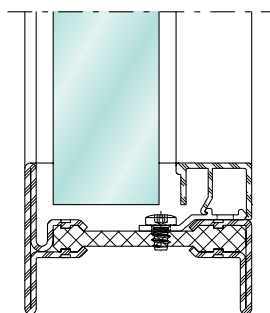
with 01 = Stainless steel, bright, material 1.4401 (AISI 316)

with 09 = Steel KB DOCOL 355W (Corten)

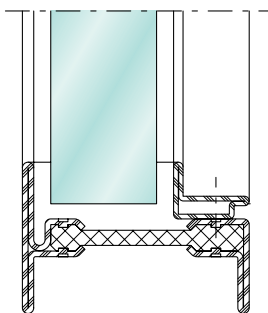
Example of Janisol Arte 2.0



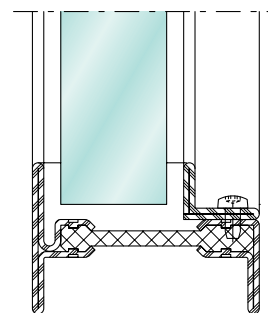
Choice of glazing bead for Janisol Arte 2.0 in steel, aluminium, stainless steel and Corten



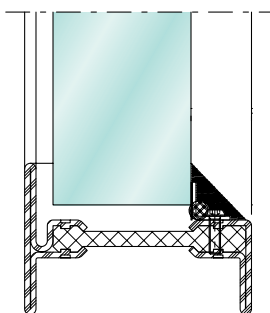
Aluminium



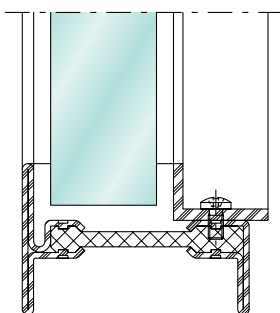
Steel



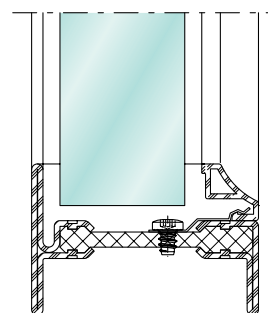
Steel  
Stainless steel  
Corten



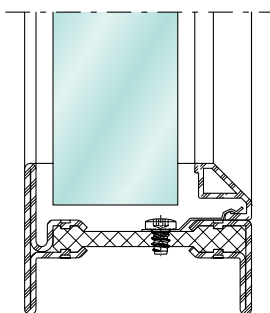
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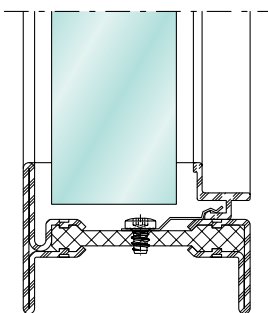
Steel  
Stainless steel



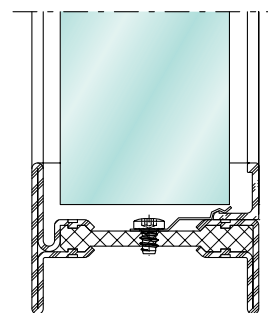
Aluminium



Aluminium



Aluminium



Aluminium



### Janisol Arte 2.0 Weatherstrip groove

Janisol Arte 2.0 features an impressively wide range of profiles, new glazing bead options (including for large glass thicknesses), simple and efficient fabrication and fewer accessories. The system has passed the tests for mechanical strength, impact resistance and durability.

#### Benefits

- Composite technology tested in accordance with EN 14024
- CE classification in accordance with EN 14351-1
- Inward and outward-opening fixed glazing, single and double-vent windows
- Vent sizes of 1000 × 2400 mm
- Glass thicknesses of 20 - 47 mm



### Janisol Arte 2.0 3D stainless steel screw-on hinge

All of the benefits of the Jansen screw-on hinges are also combined in this small format.

#### Benefits

- For vent weights up to 150 kg
- Height adjustment of +/- 3 mm
- Lateral adjustment and weatherstrip contact pressure of +/- 1.2 mm
- CE tested in accordance with EN 1935
- For use with all materials



### Janisol Arte 2.0 Multi-point window locking


The multi-point locking function allows simple, direct installation in the insulating bar and makes it easy to cut the extensions to length to allow the handle to be freely positioned.

#### Benefits

- Adjustable locking rollers make a variable contact pressure possible
- For use with all materials
- Test certificates available



Working with  
systems  
Systems  
without limits.





Augustinerbräu-Sudhaus, Salzburg/AT  
Architect: Bmst Dipl.-Ing. Helmut Hopfner, Salzburg/AT  
(Janisol Arte)

# Jansen

## Multi-purpose doors



Jansen is the first ever manufacturer to introduce a tested system of new double-leaf RC3 glazed full panic doors, which are burglar-resistant and equipped for escape routes, in order to meet increasing security requirements in combination with the escape route facility.

The full panic door is the optimum solution not only for buildings that are subject to frequent use by the public, such as airports, sports stadiums, hospitals or schools, but also for buildings that are at risk of break-ins, such as jewellers or banks. The burglar resistance and escape route functions have been verified for the Janisol, Janisol HI, Janisol 2 EI30 and Jansen-Economy 60 systems. In addition, bullet resistance to class FB6 can be achieved, depending on the system.

### Design benefits

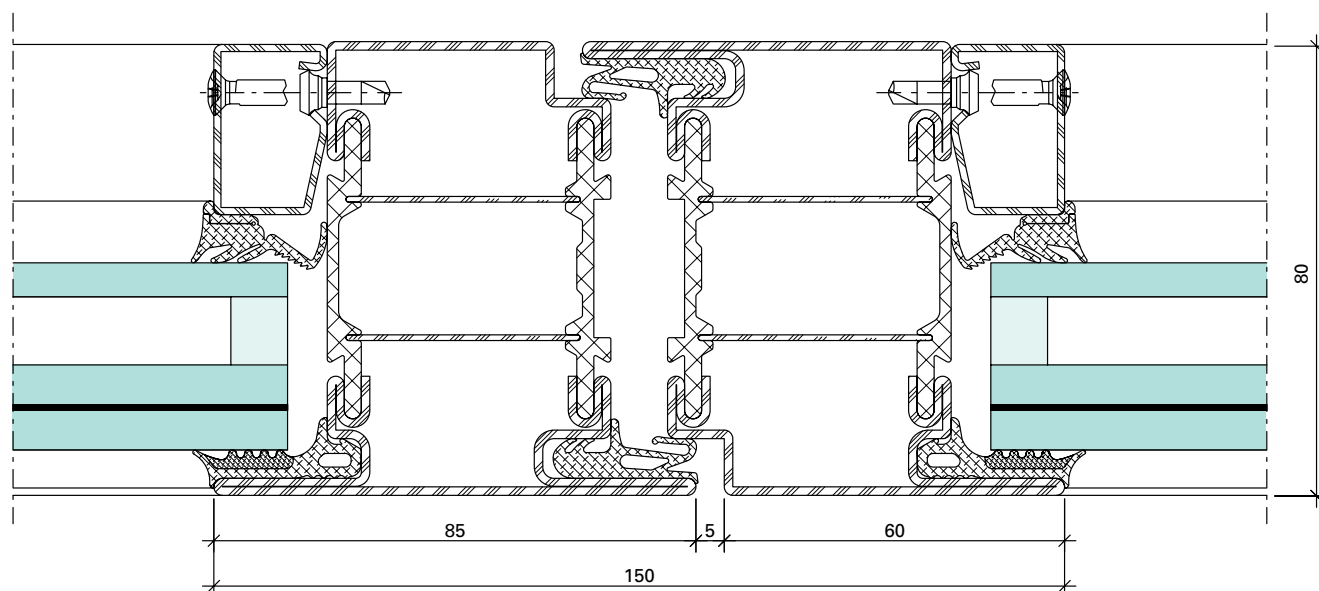
- Tested in accordance with EN 1627:2011
- Escape route standards EN 179 and EN 1125
- RC2 and RC3
- Highest mechanical strength class 4 (EN 1192)
- Highest durability class 8 (EN 12400)
- Single and double-leaf doors
- Inward and outward-opening
- Design without a threshold
- Concealed fittings
  - Integrated door closer
  - Concealed screw-on hinges
- Locks with standard and panic function



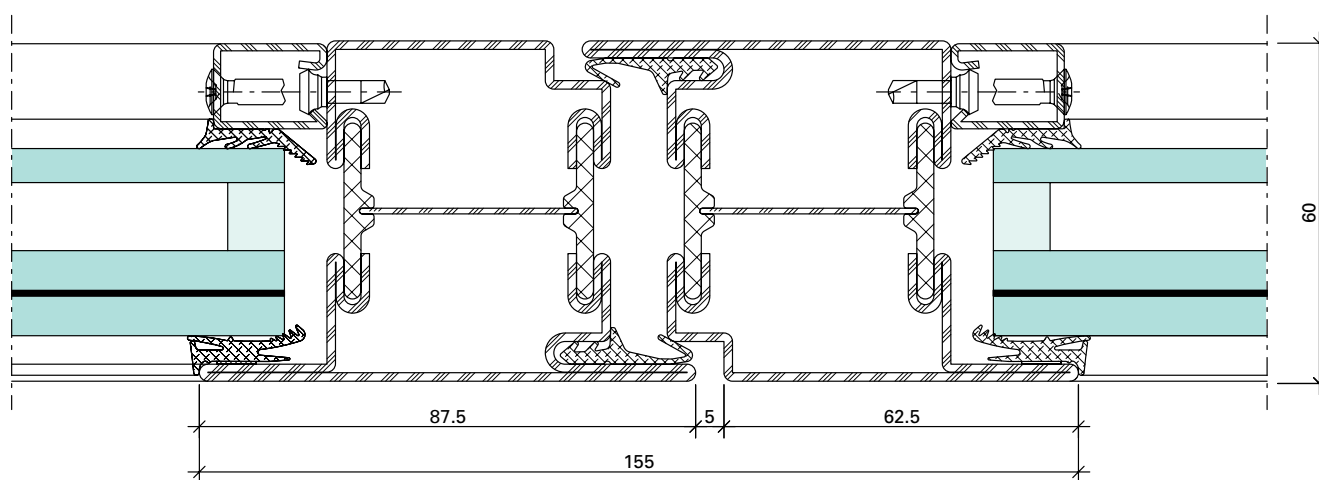




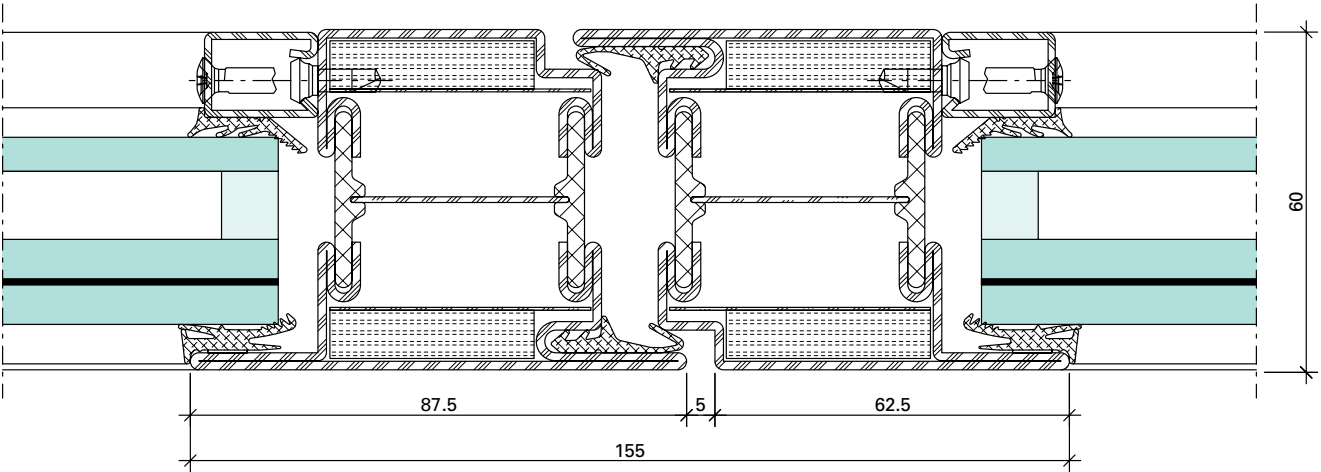
Janisol HI multi-purpose door



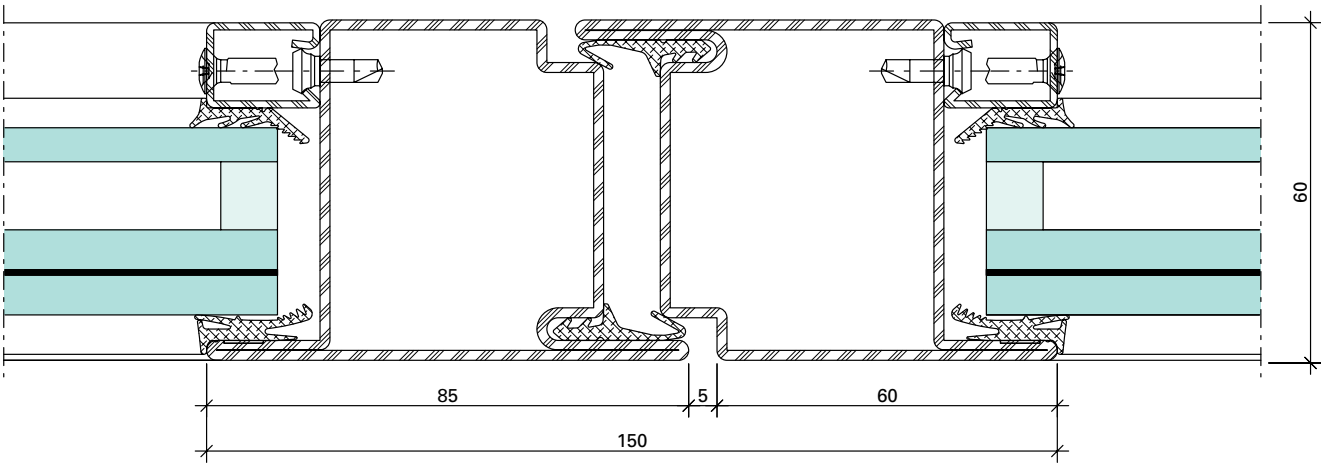
Janisol multi-purpose door



Janisol 2 EI30 multi-purpose door



Jansen-Economy 60 multi-purpose door



# Janisol 2 EI30

## Anti-finger-trap doors



Thanks to its rounded half profiles, the Janisol 2 EI30 anti-finger-trap door with fire protection reduces the potential risk of injury at the secondary closing edge to a minimum and is therefore particularly suitable for buildings subject to frequent use by the public, such as schools, shopping centres, train stations or airports. The high-performance hinge bushes at the top and bottom ensure maintenance requirements are low. The system is also simple and cost-effective to fabricate, as the Janisol 2 EI30 profiles from the standard range can be used for the frames and door leaves.

### Design benefits

- No crushing or shearing points at the secondary closing edge in accordance with DIN 18650 and EN 16005
- Tested in accordance with EN 1634 and DIN 18095-2
- Tested for fire resistance, smoke protection and durability
- Clearance max. single-leaf: 1380 × 3000 mm
- Clearance max. double-leaf: 3000 × 3000 mm

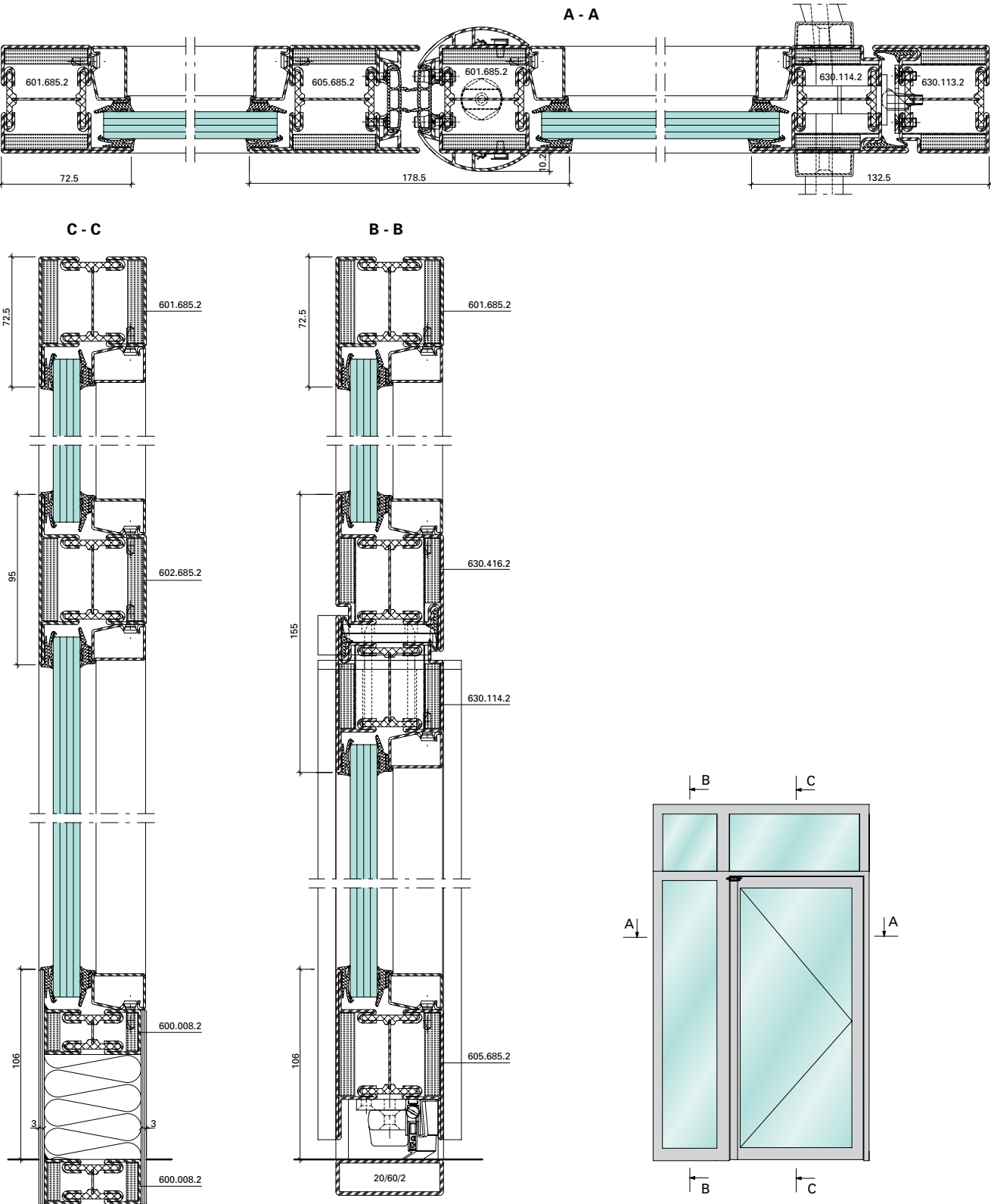
### Fabrication benefits

- Simple and efficient fabrication, similar to the Janisol anti-finger-trap doors without fire protection
- Range of fittings almost identical to the Janisol anti-finger-trap doors





Example of a Janisol 2 EI30 anti-finger-trap door





Manor House Wassenaar, Wassenaar/NL  
Architect: Dok architecten, Amsterdam/NL  
(Janisol Arte / VISS roof glazing)

# Practical benefits

## Concealed carry bar

The concealed carry bar is used in the top door rebate of double-leaf panic doors. When the door is closed, it is completely concealed and therefore can also not be reached by vandals. The carry bar can be used with both surface-mounted and integrated door closers.

It has the following certifications:

- CE marking in accordance with product standard EN 1158
- Mechanical durability test of 200,000 cycles in accordance with EN 1191
- Fire resistance test in accordance with EN 1634-1

The concealed carry bar is available in two different sizes, which are used depending on the width of the door. The carry bar can be used in the following door systems:

- Janisol HI
- Janisol
- Janisol 2 EI30
- Jansen-Economy 60
- Jansen-Economy 50

## Janisol HI 3D screw-on hinge

The new 3D screw-on hinge was developed for the Janisol HI system. It can be installed quickly and easily and is the first hinge of its generation that does not require the weatherstrip to be notched in the hinge area. This means that it does not affect the performance values as the weatherstrip level has not been changed. Tested in accordance with EN 1935, it achieved class 7 for continuous operation. That is the best possible classification for hinges in areas subject to heavy use.

- Available in galvanised steel and stainless steel (1.4307)
- Max. leaf load for 2 hinges is 215 kg, for 3 hinges it is 280 kg
- Height can be adjusted:  $\pm 4$  mm
- Weatherstrip pressure and lateral adjustment:  $\pm 1.5$  mm
- Corrosion resistance class 3 (steel); class 4 (stainless steel)
- Tested in accordance with EN 1935
- CE marking
- Easy to fabricate

## Burglar-resistant Jansen windows

The Jansen window systems Janisol HI, Janisol, Janisol Primo and Jansen-Economy 50 have all now been tested to RC1 – RC3. Double-vent windows can also be manufactured to RC3. With the new fittings concept, complete fittings in class RC2 can be purchased and upgraded to RC3 thanks to a simple enhancement.

For RC1N, the standard fitting can be used with an additional locking point. With the required number of locking points, all of the system sizes can be offered.

- Certified in accordance with EN 1627 by the ift Rosenheim
- Various opening types
- Wide range of profile and glazing bead options
- Wet and dry glazing
- Fittings can be fixed in place without rivet nuts or flow drilling

# Materials for the future

## ZF 100 coatings for door and window profiles

We are the first supplier of steel profiles to exploit the many advantages of galvanized hot-dip coatings and are hence gradually replacing the current Z 275 coatings with ZF 100 (zinc-iron alloys) for the basic corrosion protection of all profiles.

### First-class welding characteristics

The innovative surface finish combined with a lower coating thickness leads to the formation of fewer pores, less smoke and fewer sparks when welding.

### Outstanding coating adhesion

Excellent suitability for coating with wet paint and powder coatings and even more reliable fabrication in the coating process are guaranteed. The existing Z 275 products can be combined with ZF 100 in any way without visual differences.

### Increased efficiency

The galvanized surfaces allow our customers to work with simplified, more energy-efficient and less labour-intensive process steps and lead to higher process reliability.

### Comprehensive corrosion protection

The ZF alloy coating provides temporary protection against corrosion and the formation of flash rust. Jansen profiles are therefore optimally protected against the effects of the weather on the inside as well as the outside, from storage right through to fabrication and coating.

### Optimised surface quality

The particularly defined microstructure of the ZF alloy coating forms an adhesive protective layer on the steel and is characterised by a uniformly fine-grained crystal structure with a high surface quality and optimum coating adhesion.

## Stainless steel profiles

The Jansen stainless steel profiles are suitable for use in industrial areas, areas with strict hygiene requirements and coastal regions, as well as when there are high requirements in terms of aesthetics. The stainless steel grades 1.4301 (AISI 304) and 1.4401 (AISI 316) cover all requirements. All tests and certificates for the CE marking and the profile composite are available.

### Finishing

All profiles are also available with a finished design. These will now be processed on an order-specific basis. The visible surfaces can be ordered with grain finish 220-240 or 320-400.

### Colour coding

The ends of the stainless steel profiles are colour coded for quick identification (white = 1.4301/4307, blue = 1.4401/4404). The markings on the profiles remain unchanged.



## Corten profiles

For architects and design engineers, an additional alternative to steel is now available with the weatherproof Corten steel. When exposed to the weather, the surface texture of Corten is brought to life by the changes in the colour tones and shading during the corrosion process and by the light conditions

which change over the course of the day. The corrosion protection layer of Corten steel changes colour over time from light brown to brown to almost black, and is reminiscent in its colour characteristics of the patina formation on bronze or copper. The beauty of the buildings from earlier periods lies in

the fact that materials such as this were able to blend in with their natural surroundings and the landscape due to their patina. The Jansen Corten hollow steel profiles can be fabricated easily and in virtually the same way as steel profiles. The Corten profiles are also very easy to weld.



Panzerhalle, Salzburg/AT  
Architect: ARGE LP architektur, Christoph Scheithauer, hobby a., strobl architekten ZT GmbH  
(Janisol HI / Janisol 2 EI30 / VISS TVS / VISS Fire TVS EI30 /  
VISS Fire TVS EI90 / VISS Fire TVS / Jansen folding wall / Jansen-Economy 50)

Freedom  
in design.  
Reliability in  
fabrication and  
installation.







De Grote Post Art and Cultural Centre, Oostende/BE  
Architect: B-Architecten, Antwerpen/BE  
(VISS TVS / VISS Fire EI60 / Janisol 2 EI30 / Janisol doors)



# BIM (Building Information Modeling)

## Supporting the entire life cycle of a building

BIM is experiencing increasing popularity among architects and developers. In order to meet the needs of BIM users, Jansen is offering all of its door systems as 3D building components on its homepage and on the BIMobject platform for use in digital building models. These contain information about the geometry and product data. The BIM models are available as a free download for Revit and ArchiCAD.

### Benefits

- Interfaces to JANIssoft, Revit, ArchiCAD
- Detailed visualisation in 3D
- Planning reliability by means of exact calculations
- Error detection as early as the planning stage
- Transparent cooperation with all those involved
- Comprehensive information about Jansen steel systems





# JANIssoft planning software

## Fast and simple individual solutions

JANIssoft enables the professional design, calculation and digital construction of Jansen systems for doors, windows, façades and sliding systems. Using the new version, developers and fabricators can easily create quotations and orders with the corresponding detailed drawings and calculations. The program interface has been revised and updated. Operation is therefore even easier and more intuitive; calculation is even faster.

Thanks to optimised software functionality, the procedure from job planning to fabrication and machine control can be made even more efficient. JANIssoft is available in three versions, «basic», «advanced» and «enterprise», which, together with the standard version for calculation and order processing, also offer practical additional functions.

### Benefits of JANIssoft

- 2D and 3D constructions for doors, windows and façades
- 3D visualisation with high-resolution detailed illustrations
- Direct transfer of the profile sections to CAD
- Interface to PPS and ERP systems for transferring the results
- Comprehensive technical and commercial data on Jansen system products
- Automatic calculations on structural properties, U values and prices
- Preliminary structural calculation for snow and wind loads
- Practical templates for all profile systems
- Simple cutting optimisation
- User-defined selection of fittings from the catalogue
- Creation of machine and saw data
- Interface with Revit and IFC formats for Jansen BIM models



Biblioteca Joan Maragall en Sant Gervasi, Barcelona/ES  
Architect: Baena Casamor Arquitectes BCQ s.l.p., Barcelona/ES  
(VISS Basic TVS / Janisol)

# Machine control with JANIssoft

## JANIssoft machine control for fast processing

The new JANIssoft machine control calculates the processing for selected steel systems. The processing data is transferred to the machine via an exchange file.

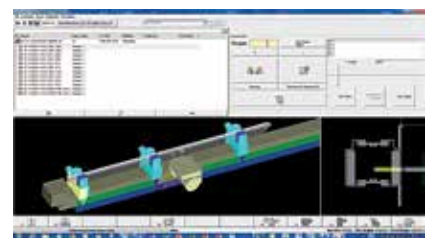
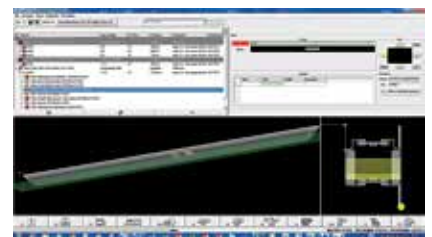
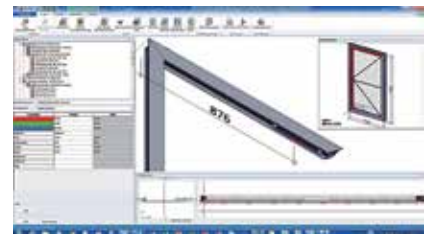
All profile processes are initially visualised in a 3D processing mode, where they can be adapted to customer requirements. It is possible to check the processes first using JANIssoft in the office or during fabrication. The Jansen metal machine control system supports different saw types and CNC machines.

### Product benefits

- Unit entry and job planning in one software solution
- Automatic calculation of profile processes
- Processing mode visualised in 3D
- Processes can be easily adapted to special customer requirements

### Fabrication benefits

- Error prevention through the visualisation of the fittings components and processes in 3D
- Automatic wall recognition reduces the fabrication time
- Optimum interaction with machines using only one exchange file
- Faster entry for customer-specific profile processes due to processing lists
- Representation and dimensioning of the processes for all the profiles reduce errors
- Serial processing for the fast entry of repeat processes



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