



VISS Façades

Thermally insulated steel system for
mullion/transom constructions

Load-bearing elements

Convincing arguments

VISS façade systems build on the benefits of steel

VISS, the fully insulated glazing bar system, is a thermally insulated steel system for mullion/transom constructions, the modular components of which can be used to construct any façade. In combination with profiles in different basic depths and/or internal reinforcement options, specific structural specifications can be met – the functional aspects are fulfilled by a wide range of accessories and infill units. Neither the aesthetics nor the homogeneous appearance of the façade structure are affected by this. As a result, architects and developers are able to meet a range of thermal insulation, sound reduction and fire protection requirements while maintaining a uniform look. Fabricators benefit from the tried-and-tested application and simplified warehouse storage due to the small number of individual components.

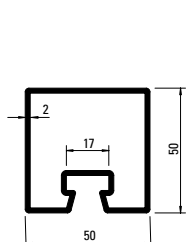
Jansen offers various structural systems for calculating the dimensions of steel façades: freely suspended, clamped on one side or as continuous beams. Base, top and fixing plates for attachments to building structures can be welded in place easily and securely. Profiles with face widths of 50 and 60 mm and basic depths of up to 280 mm are ideal for room-side load-bearing structures. They can be welded on or pushed in. Push-in and clip-in connections mean that systematic pre-fabrication in the workshop is an option even for large-scale façades. With welded constructions, complex units and unusual shapes can be precision-manufactured. Both fabrication methods can also be combined.

The Jansen VISS façade systems are tested in accordance with the product standard EN 13830. On this basis, manufacturers can label façades with the CE mark which is required throughout the EU.

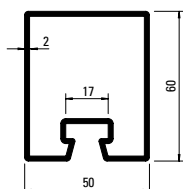


Profile range

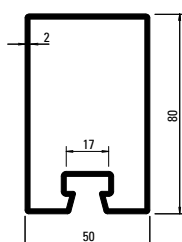
Load-bearing profiles 50 mm



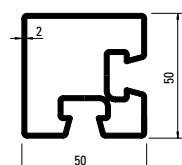
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76.694 Z



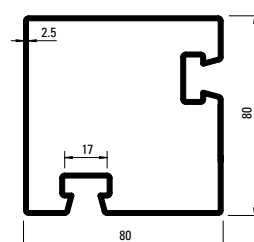
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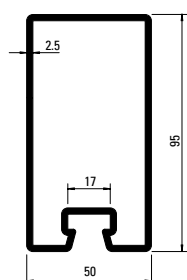
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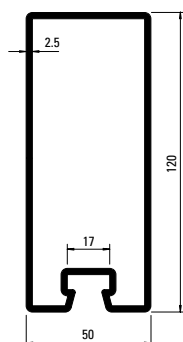
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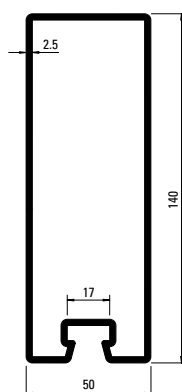
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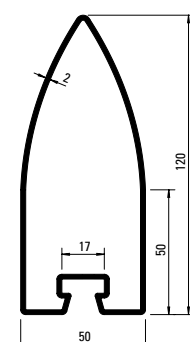
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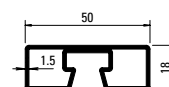
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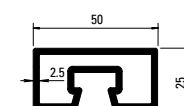
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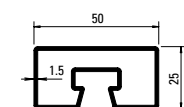
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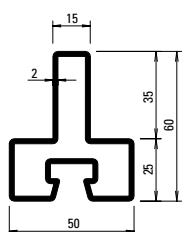
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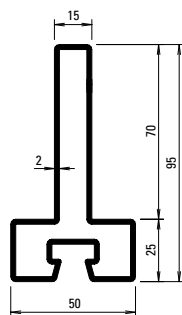
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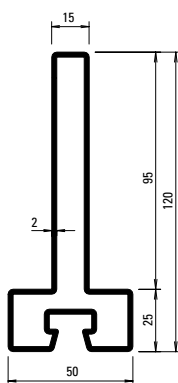
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76.114



76.115

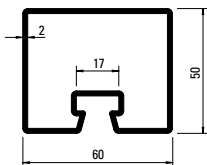


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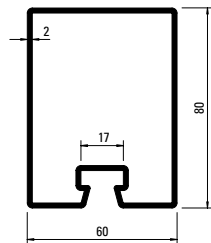
Z = made from hot-dip
galvanised strip

Profile range

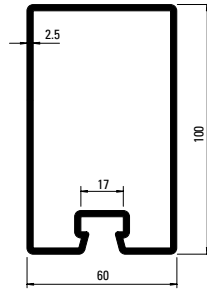
Load-bearing profiles 60 mm



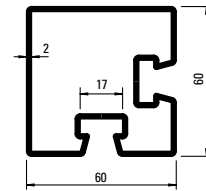
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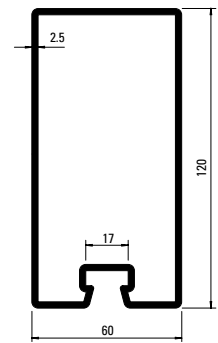
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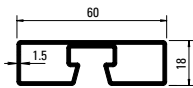
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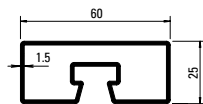
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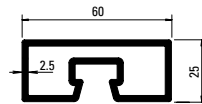
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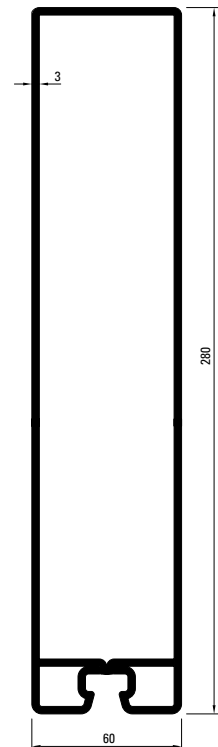
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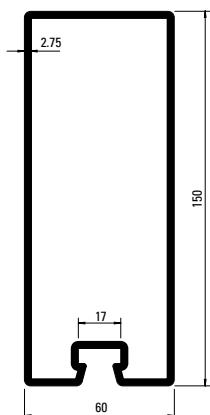
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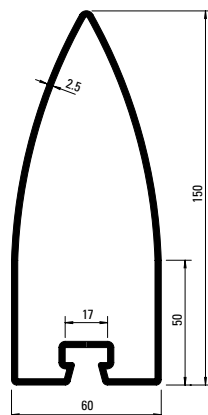
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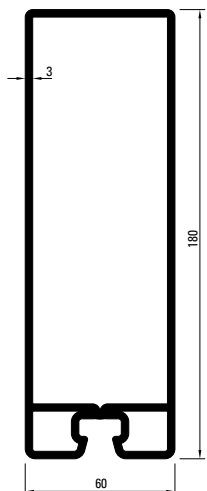
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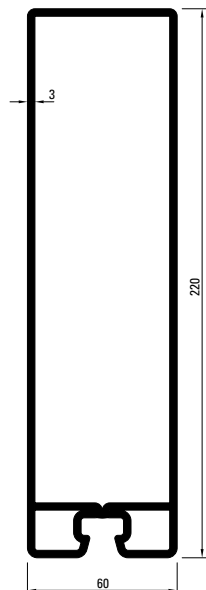
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76.667 Z



76.100



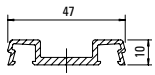
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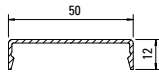
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Cover sections

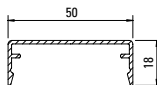
50 mm



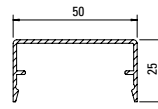
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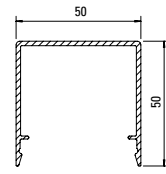
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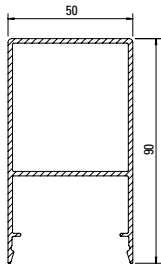
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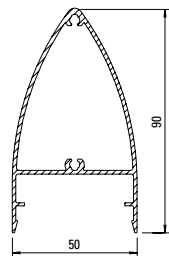
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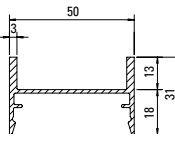
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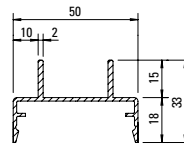
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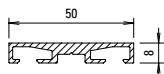
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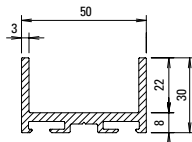
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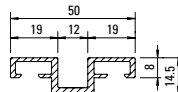
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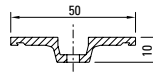
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407.817



407.858

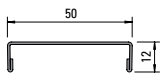


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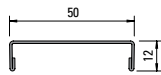


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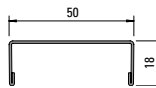
Stainless steel cover sections



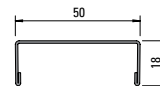
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400.862



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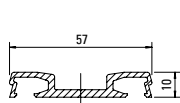


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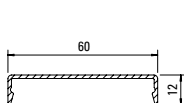


Cover sections

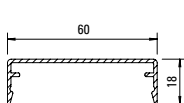
60 mm



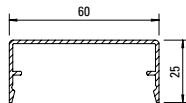
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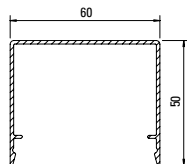
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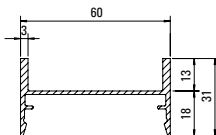
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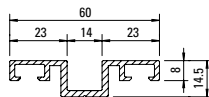
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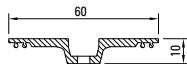
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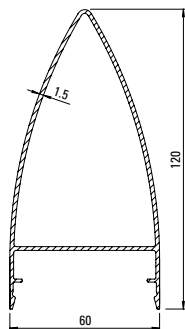
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407.822



407.823



407.915

VISS façade Vertical glazing

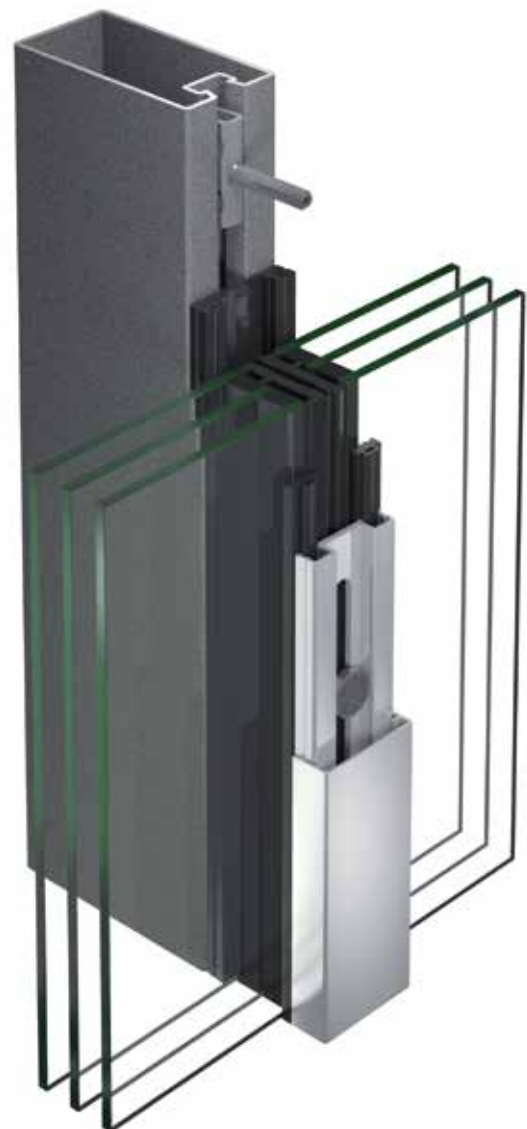


The combination of simple elegance, technical skill and economic efficiency

Whether a newbuild or a renovation project – for large and small construction projects. In accordance with structural requirements, pane sizes or the thicknesses of the infill units, the optimum components from a technical and economical perspective are selected from the modular system. The VISS façade is also available as a highly thermally insulated system with a corresponding passive house certification for newbuilds as well as renovations. Outer cover profiles are available in a range of depths and shapes. Infill unit thicknesses from 6 to 70 mm.

CE marking in accordance with EN 13830

- Thermal transmittance of $U_f > 0.73 \text{ W/m}^2\text{K}$
- Sound reduction R_w of 45 dB
- Watertightness class RE 1200
- Air permeability class AE
- Resistance to wind load class 2 kN/m²
- Impact resistance class E5/I5
- Successfully TRAV safety tested (German technical regulations for safety barrier glazing)



Certificate																													
Certified Passive House component																													
for cool, temperate climate, valid until 31.12.2015																													
Category:	Curtain Wall																												
Manufacturer:	Jansen AG																												
Product name:	6463 Oberriet SG, SWITZERLAND																												
	VISS HI																												
The following comfort criteria were used in awarding this certificate: Given a U_g value of $0.7 \text{ W/(m}^2\text{K)}$ and an element size of $1.20 \text{ m by } 2.50 \text{ m}$, $U_{CW} = 0.80 \text{ W/(m}^2\text{K)} \leq 0.80 \text{ W/(m}^2\text{K)}$ Taking into account the installation based thermal bridges, and provided that the installation is, with regard to the thermal bridges, equal or better than shown in the data sheet, the facade meets the following criterion: $U_{CW, \text{average}} \leq 0.85 \text{ W/(m}^2\text{K)}$																													
Thermal data of the construction <table border="1"> <thead> <tr> <th></th> <th>U-value $U_f \text{ (W/(m}^2\text{K))}$</th> <th>Width $l \text{ (mm)}$</th> <th>$\Psi_f \text{ (W/(m}^2\text{K))}$</th> <th>$\Sigma \Psi_{\text{req}, 4.0} \text{ (J)}$</th> </tr> </thead> <tbody> <tr> <td>Spacer</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Transom (t)</td> <td>0.82</td> <td>50</td> <td>0.037</td> <td>0.81</td> </tr> <tr> <td>Mullion (m)</td> <td>0.81</td> <td>50</td> <td>0.037</td> <td></td> </tr> <tr> <td>Thermal glass carrier bridge Ψ_{GC} [W/K]</td> <td></td> <td></td> <td></td> <td>0.008</td> </tr> </tbody> </table> *Spacers of lower thermal quality, especially those made of aluminium, lead to significantly higher thermal losses and lower temperature factors.						U-value $U_f \text{ (W/(m}^2\text{K))}$	Width $l \text{ (mm)}$	$\Psi_f \text{ (W/(m}^2\text{K))}$	$\Sigma \Psi_{\text{req}, 4.0} \text{ (J)}$	Spacer					Transom (t)	0.82	50	0.037	0.81	Mullion (m)	0.81	50	0.037		Thermal glass carrier bridge Ψ_{GC} [W/K]				0.008
	U-value $U_f \text{ (W/(m}^2\text{K))}$	Width $l \text{ (mm)}$	$\Psi_f \text{ (W/(m}^2\text{K))}$	$\Sigma \Psi_{\text{req}, 4.0} \text{ (J)}$																									
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Further information see data sheet www.passivehouse.com 0157cw03																													

VISS

Roof glazing

Variety of form for individual requirements

VISS roof glazing is characterised by generosity, planning reliability and ease of assembly. In the area of roof glazing, welded steel constructions demonstrate their strength to the full.

In this way, large skylights can also be created with slimline profiles and complex designs turned into reality. In combination with the VISS façades, a harmonious transition is achieved that is technically reliable and sophisticated. Outer cover profiles are available in a range of depths and shapes. Infill unit thicknesses from 11 to 55 mm.



VISS Basic / VISS I_xtra Vertical glazing

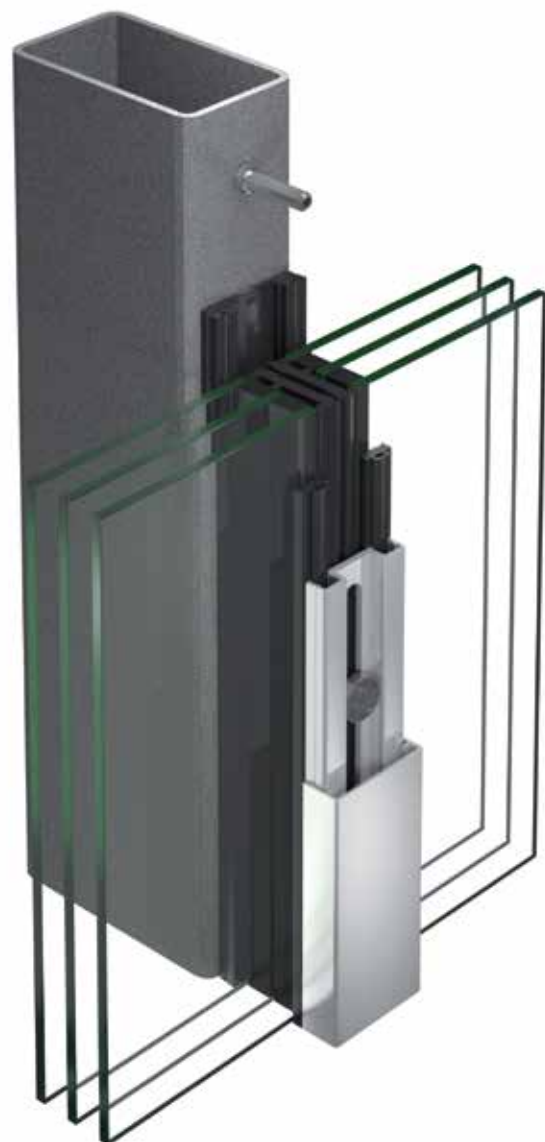


High degree of design freedom combined with the benefits of a system

With VISS Basic and VISS I_xtra, Jansen offers an economical and aesthetic system solution for façade constructions that can be mounted on any support. The system configuration is based on the proven VISS system. Implement façades with large spans and select the form of load-bearing structure according to architectural and structural requirements. Outer cover profiles are available in a range of depths and shapes. Infill unit thicknesses from 6 to 70 mm.

CE marking in accordance with EN 13830

- Thermal transmittance of $U_i > 0.95 \text{ W/m}^2\text{K}$
- Watertightness class RE 1200
- Air permeability class AE
- Resistance to wind load class 2 kN/m^2
- Impact resistance class E5/I5
- Successfully TRAVa safety tested (German technical regulations for safety barrier glazing)



VISS Basic Roof glazing

The implementation of challenging skylight constructions with large spans

The aesthetic and economical superior system solution for roof constructions that can be mounted on any support. VISS Basic for roof glazing is a tried-and-tested system solution and enables use in metal and steel construction as well as freedom of choice in terms of load-bearing profile forms. Infill unit thicknesses from 6 to 55 mm.





VISS Linea and VISS Delta



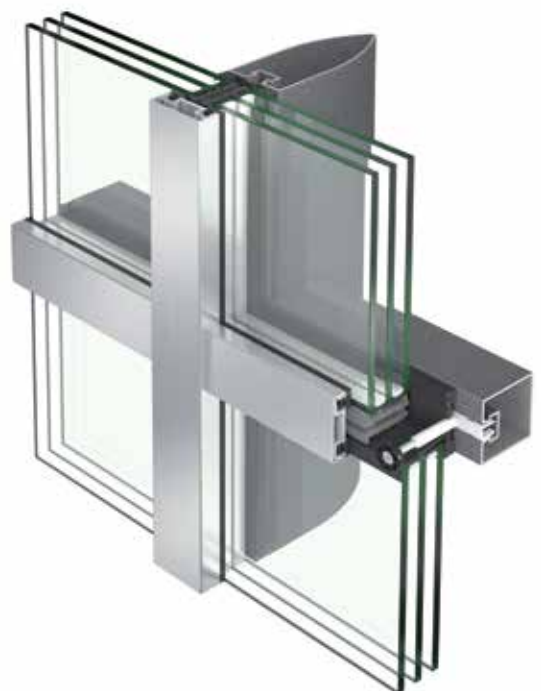
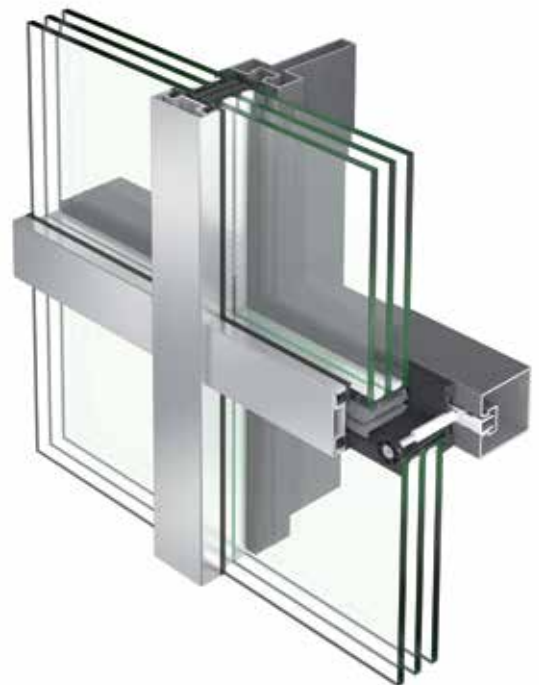
Profiles for impressive steel façades

Customers are attracted to these profiles with minimalist shapes which allow maximum light penetration to make interiors seem lighter – whether it be the elegant arrow-shaped VISS Delta or VISS Linea, the strong profile in the shape of a T-beam.

With a face width of only 50 mm and a shape tapered towards the interior, the profiles have a particularly light and elegant look. Various adaptable reinforcements in the hollow profile section extend the possibilities for clear, structured steel façades. The systems use approved technology and can be combined with the tried-and-tested VISS constructions.

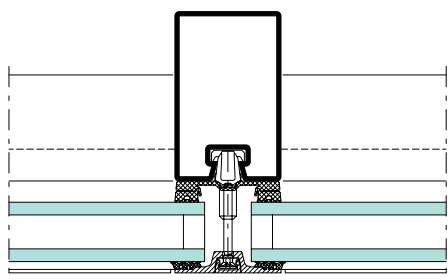
CE marking in accordance with EN 13830

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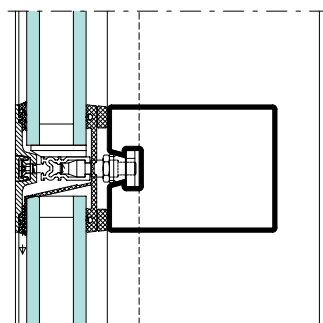
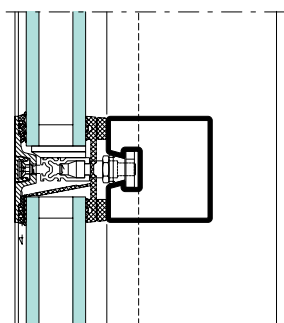
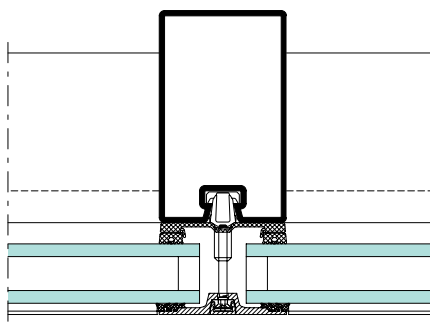


Example of a VISS façade

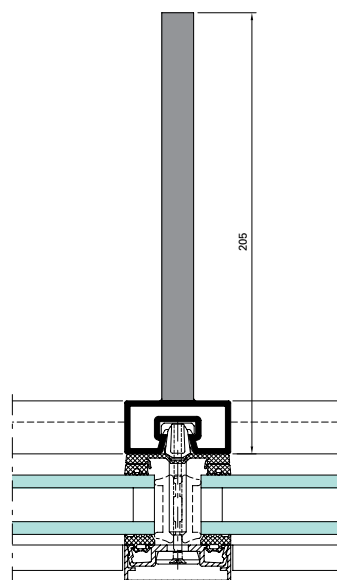
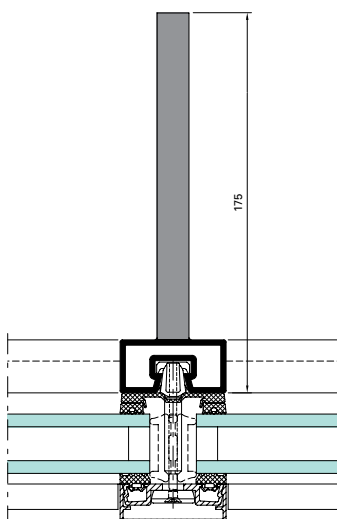
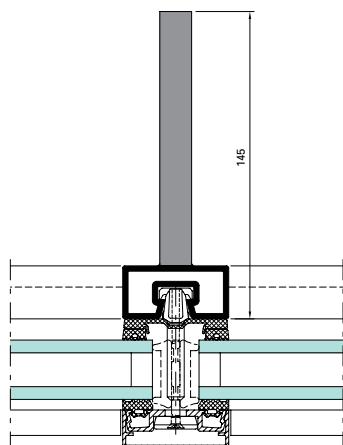
Variant with flat cover cap 50 mm

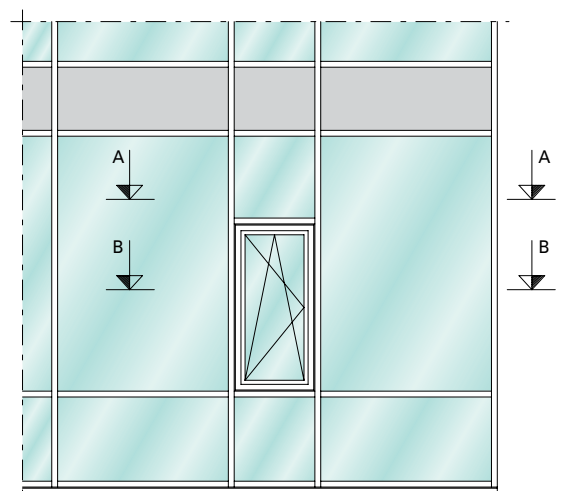
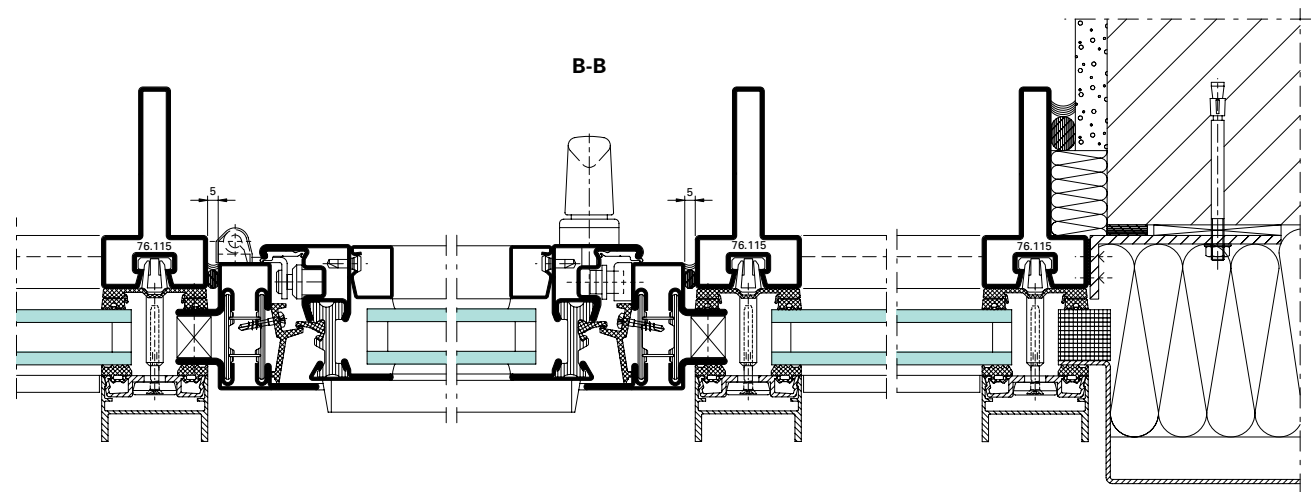
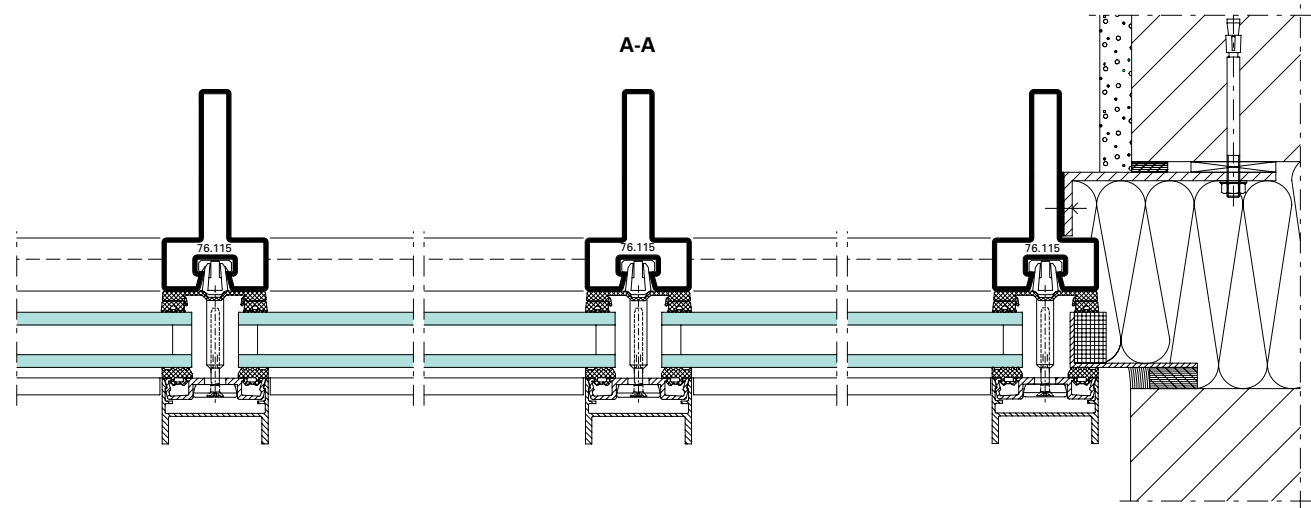


Variant with flat cover cap 60 mm

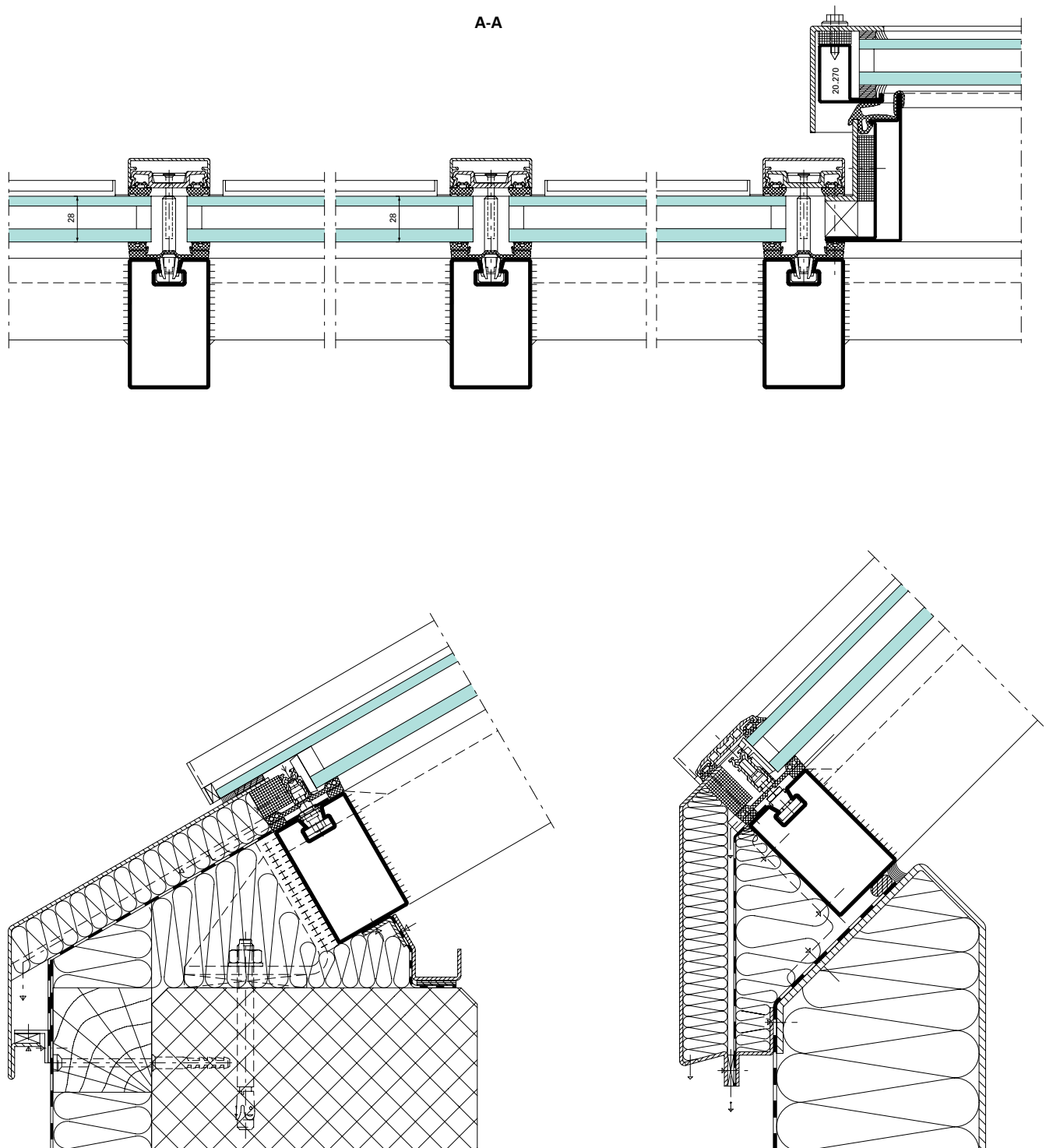


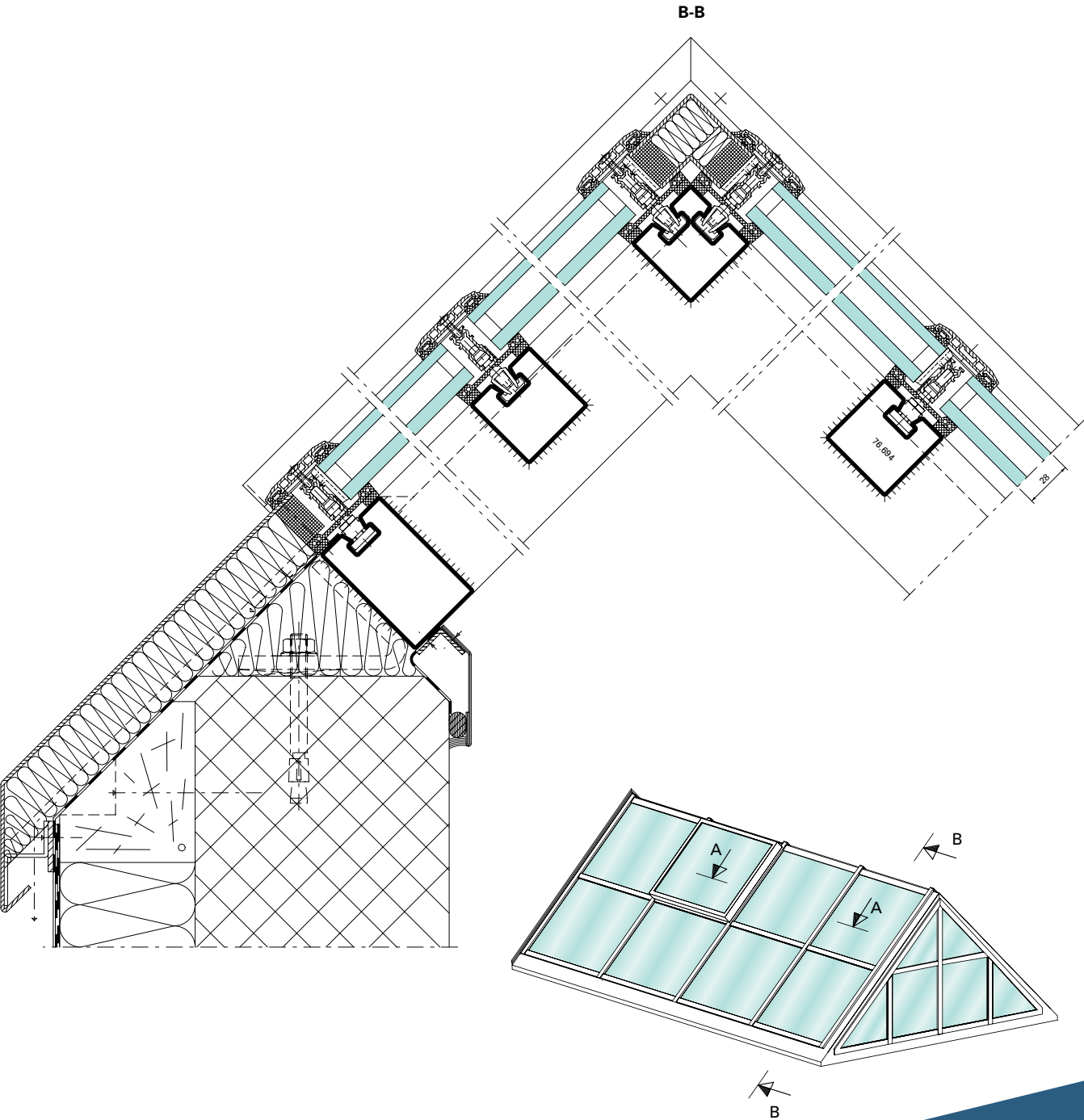
VISS Linea laser-welded variant



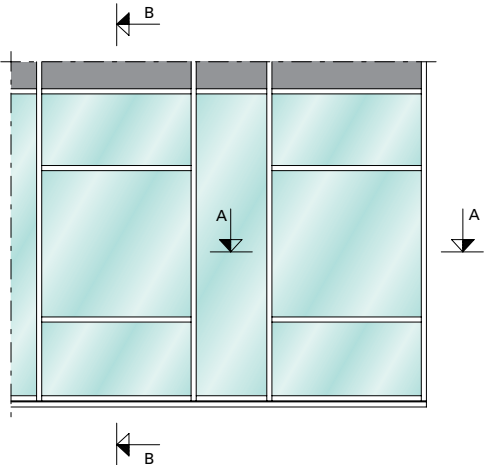
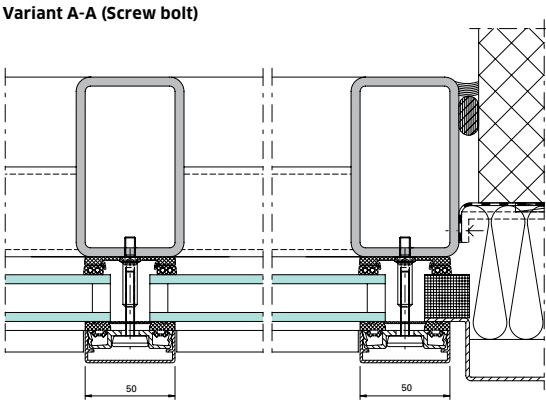
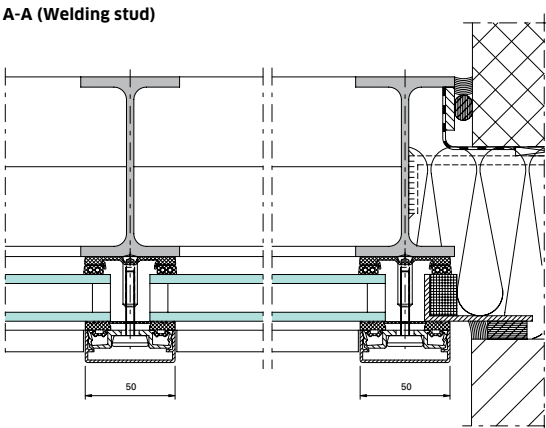
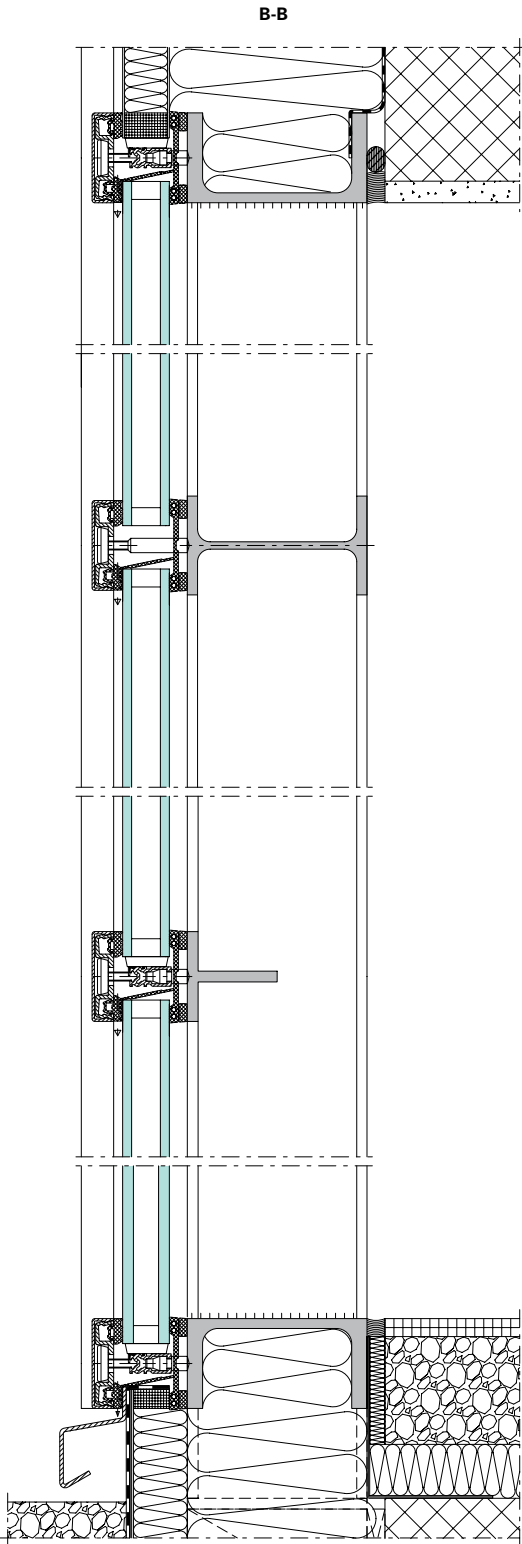


Example of VISS roof glazing

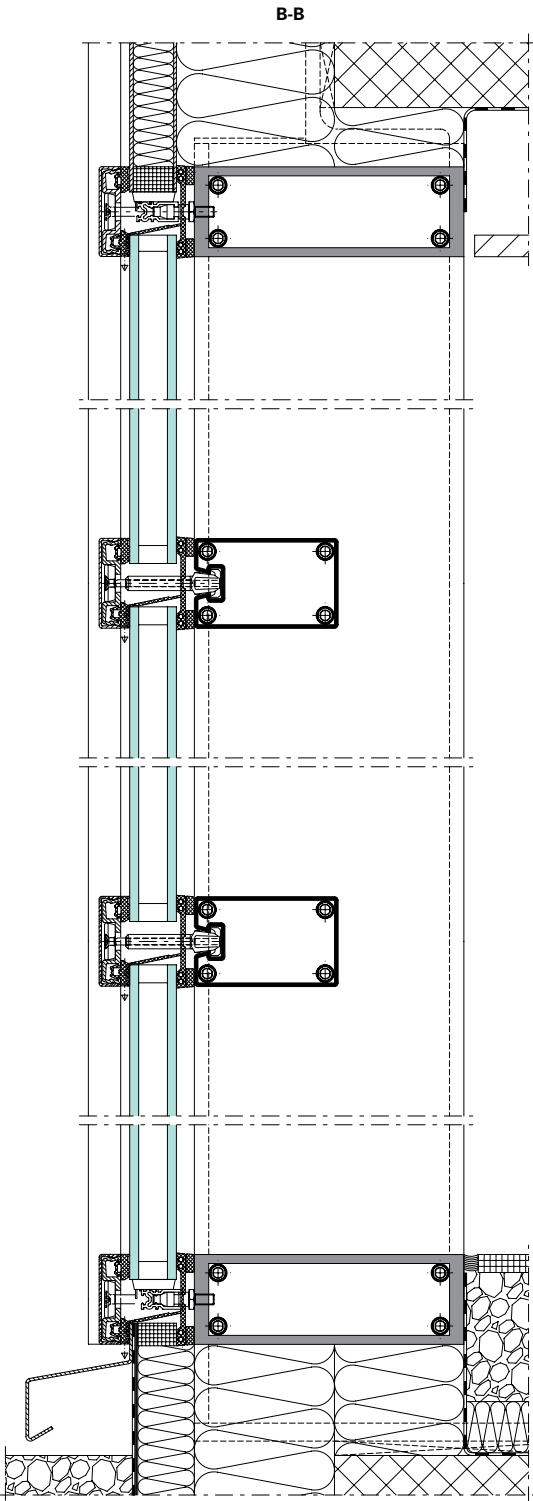




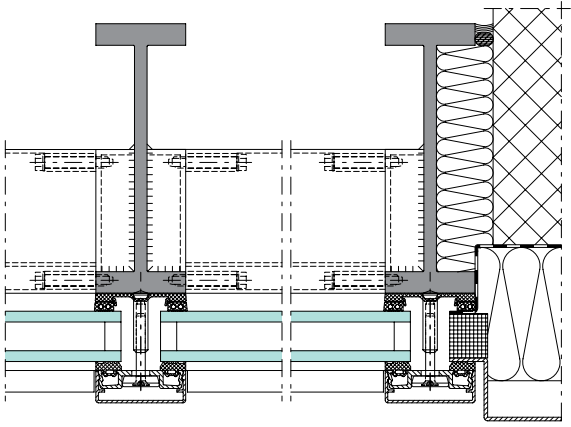
Example of VISS Basic



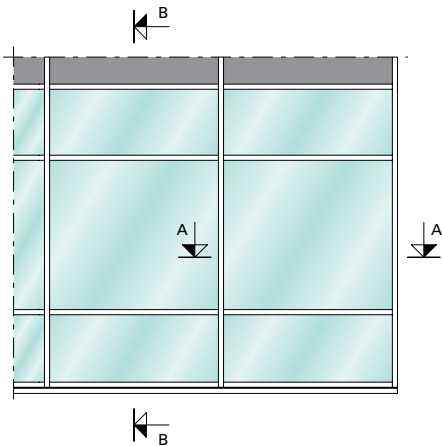
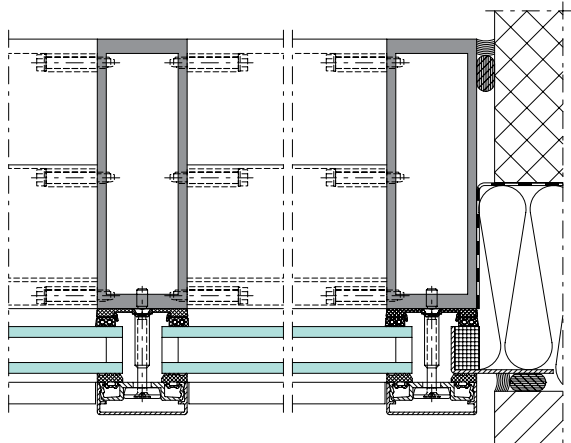
Example of VISS I_xtra



A-A (Welding stud)



Variant A-A (Screw bolt)





VISS façades

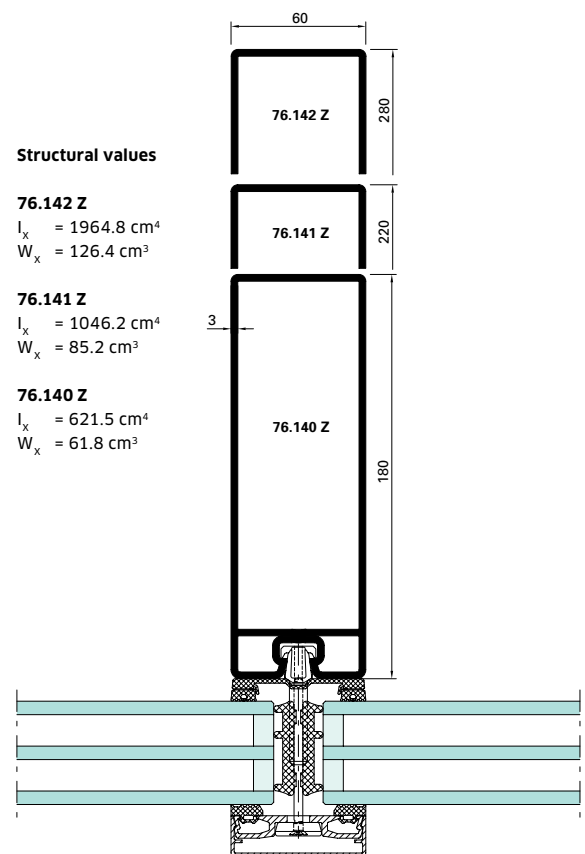
Steel profiles with high structural properties

Maximum load-bearing capacity with a minimal number of supporting units

Through the combination of new profile additions such as the VISS steel profiles, which have excellent structural properties, and the heavy-duty connecting spigot, Jansen is offering a refined complete solution for sophisticated façade constructions. The latter are characterised by large spans and heavy infill units. With them, we reduce architectural aesthetics, structural integrity and efficient fabrication to a common denominator.

Benefits

- Small edge radii
- Short delivery times as profiles can be obtained directly from the warehouse
- Efficient fabrication thanks to system profiles: complicated welding on of screw ports not required
- Reliable surface protection inside as well as outside through pre-galvanised profiles
- Low total weight compared to regular rectangular hollow profiles



VISS SG

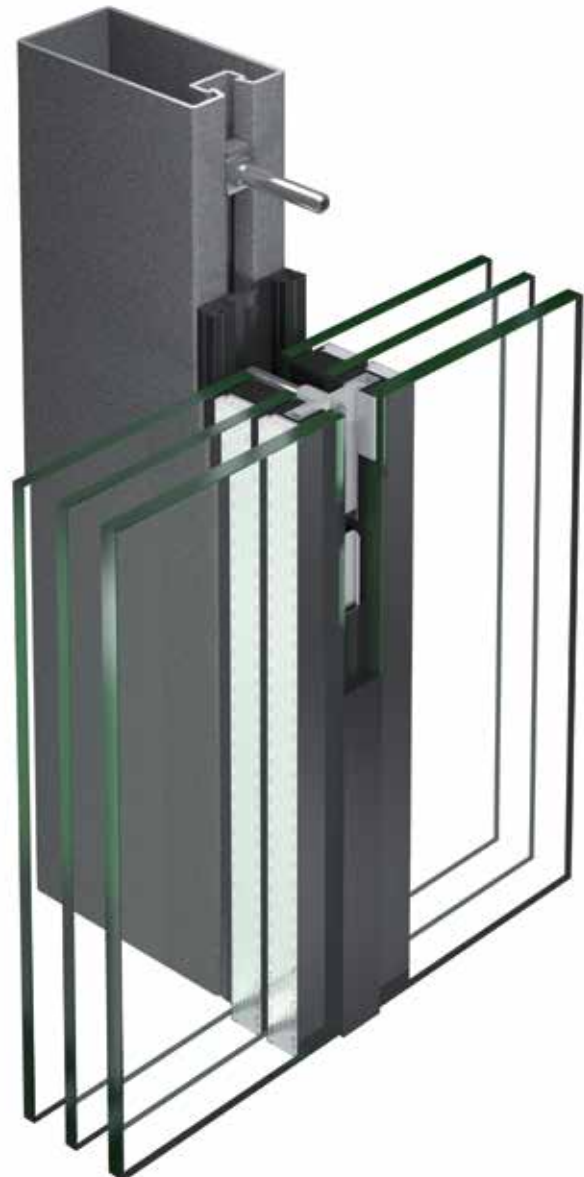
All-glass façades

When building envelopes blend in with their surroundings

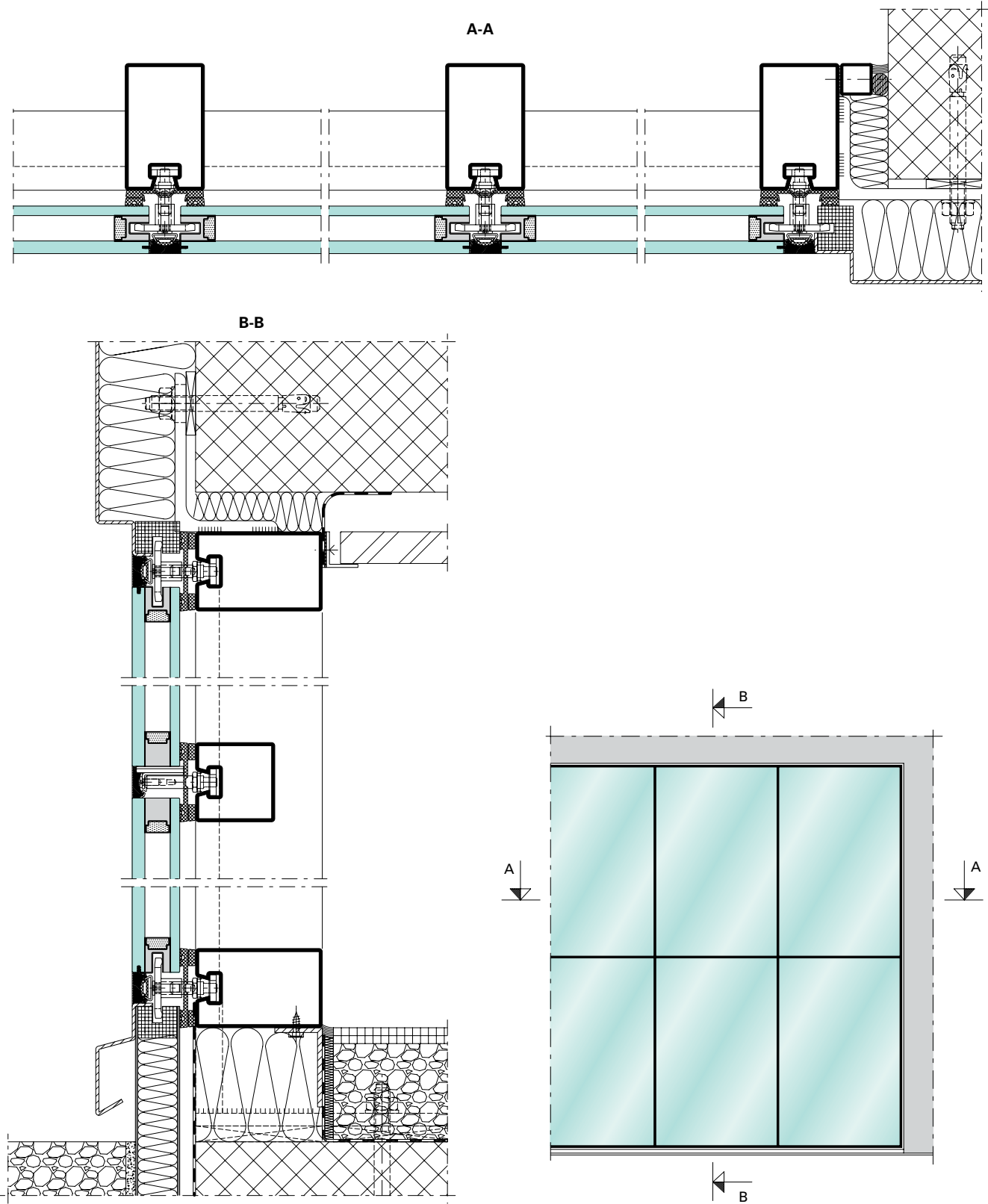
The idea of transparency in a building envelope that blends in with its surroundings can be realised harmoniously and aesthetically with an all-glass façade. The all-glass architecture creates a feeling of lightness and openness. Narrow internal sightlines and the simultaneous implementation of large-scale glass areas convey a generous sense of space. Steel and its outstanding structural properties allow developers and architects to turn their conception of all-glass façade solutions into a reality simply and economically. The VISS SG and VISS Semi SG systems can be combined with any VISS profile with face widths of 50 and 60 mm and with the VISS Basic solution which can be mounted on any support. Even roof glazing can be easily implemented in a structural glazing style using VISS SG. This provides a large variety of options with minimal additional components. Infill unit thicknesses from 30 to 70 mm. Glass areas of up to 2.5 x 5.0 m

CE marking in accordance with ETAG 002

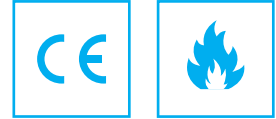
- European Technical Approval ETA 13/0015
- Thermal transmittance of $U_f > 0.84 \text{ W/m}^2\text{K}$
- Watertightness up to class RE1200
- Air permeability up to class AE
- Resistance to wind load up to class 2 kN/m²
- Impact resistance up to class E5/I5
- Successfully TRAV safety tested (German technical regulation for safety barrier glazing)



Example of VISS SG



VISS Fire Fire-resistant façades



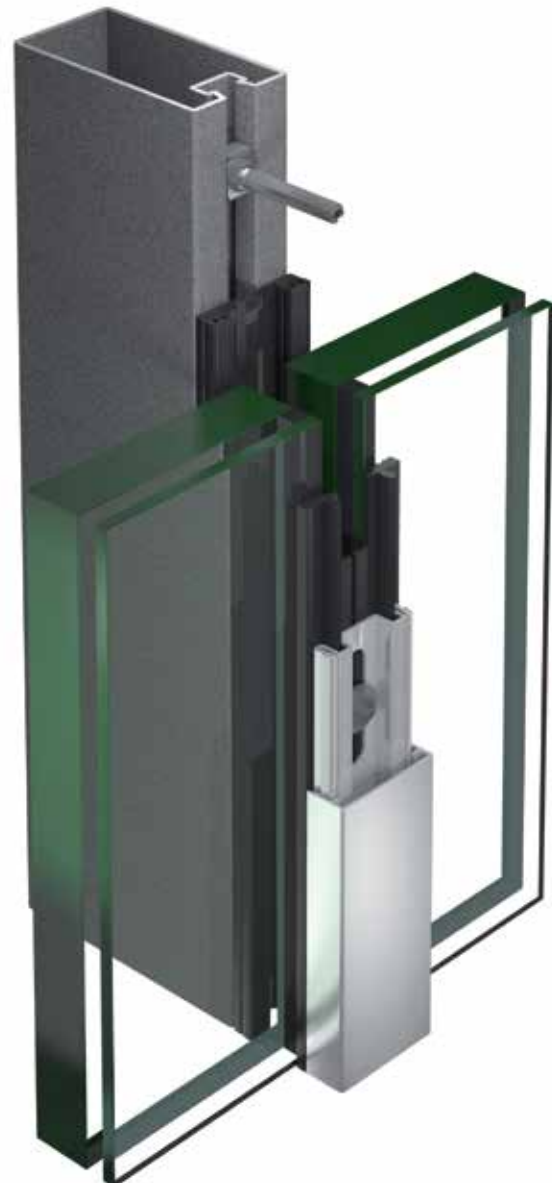
No compromise on safety

For the sensitive area of fire protection, Jansen has developed the VISS Fire system – a modular façade construction for universal use. The system is suitable for vertical façades in all fire resistance classes for interior and exterior use (E30/60/90, EI30/60/90). All classes are also TRAV safety tested. VISS Fire has also been approved for use with Janisol 2 and Janisol C4 fire doors.

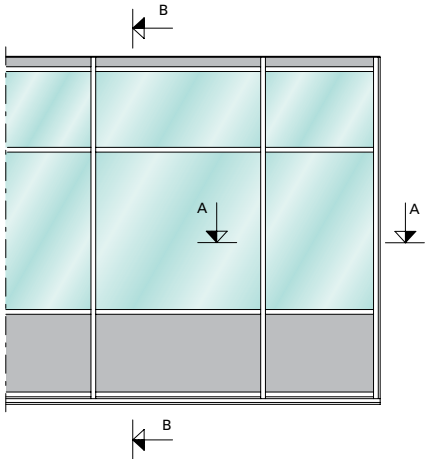
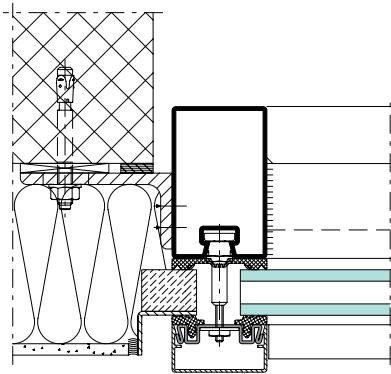
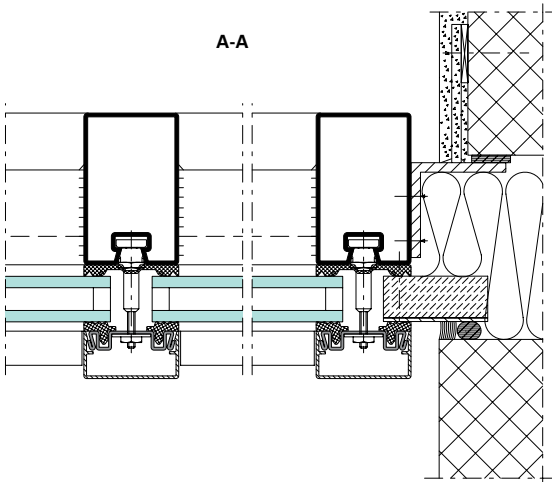
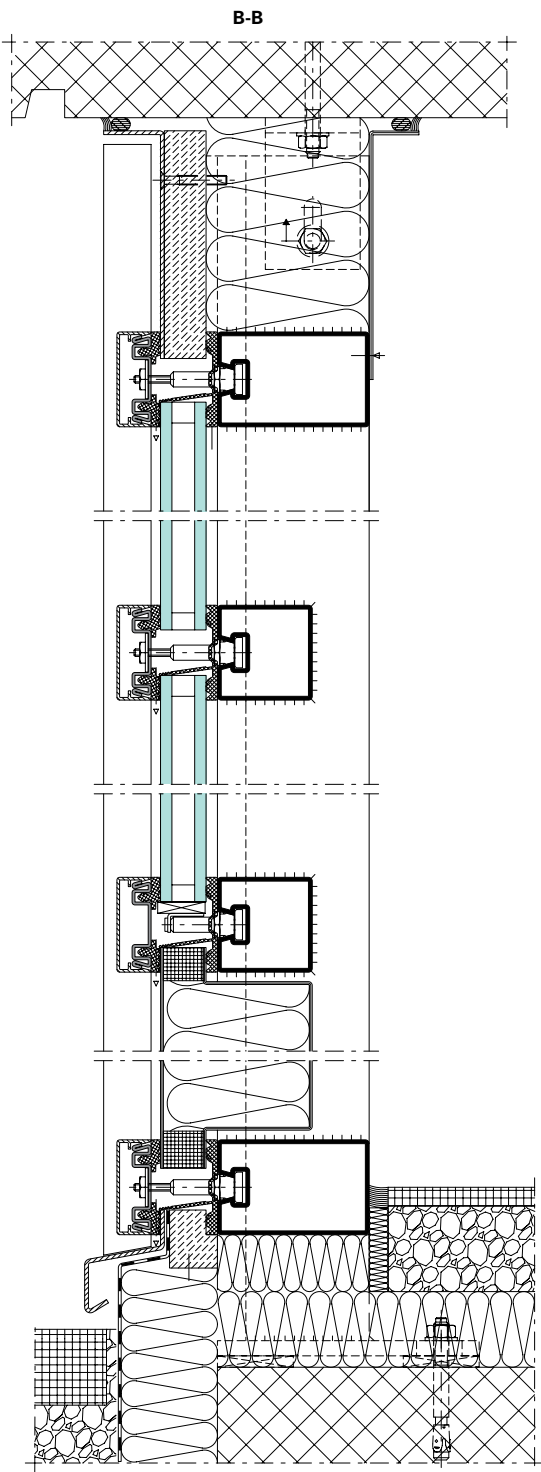
With a face width of 50 mm, fire protection requirements can be implemented discreetly and elegantly. Basic depths from 50 to 280 mm provide a whole range of structural solutions for creating storeys of up to 5000 mm in height and of unlimited width. The many alternatives give the developer the necessary freedom to create attractive large areas of glazing. The Delta and Linea load-bearing profiles can be used to make an elegant statement.

Tested in accordance with EN 1364

- Fire protection classes E30 / E60 / E90 / EI30 / EI60 / EI90
- Successfully TRAV safety tested (German technical regulations for safety barrier glazing)
- Face width of 50 mm
- Basic depths of 50 - 280 mm
- Infill unit thicknesses of 5 - 70 mm



Example of VISS Fire





VISS RC4 burglar resistance and break-out resistance



Maximum building protection

For the protection of luxury properties, Jansen has brought a further development of the burglar-resistant RC3 system solution onto the market in the shape of VISS RC4. With only a few additional components, the tried-and-tested VISS RC3 system turns into a VISS RC4 system solution that meets increased security requirements. Visually identical to the standard VISS façade, the appearance of the VISS RC4 construction does not betray its burglar-resistant properties. This means that different project requirements can be implemented with a uniform appearance.

- VISS RC4 can be combined with the existing VISS systems in the face widths of 50 and 60 mm
- Burglar and break-out resistance in accordance with EN 1627
- Thermal transmittance of $U_f > 0.84 \text{ W/m}^2\text{K}$
- Watertightness class RE 1200
- Air permeability class AE
- Resistance to wind load class 2 kN/m²
- Impact resistance class E5/I5
- VISS RC versions can be combined with the burglar-resistant profile solutions of the Janisol door and window systems
- Installation of double and triple glazing



VISS projected top-hung window and parallel-opening window

New opening types for increased freedom of design and user comfort

The VISS SG projected top-hung and parallel-opening window not only integrates seamlessly into the VISS SG façade – which allows the all-glass look to achieve its full effect – they can also be installed in the standard VISS and VISS Basic systems – for face widths of 50 mm and 60 mm.

The VISS projected top-hung or parallel-opening window can be installed as the pure SG version or alternatively as a version with subtle glazing beads. The design using glazing beads also functions as a mechanical fixing for the outer pane, which is required in Germany, for example.

Steel allows narrow internal sightlines to be retained whilst accommodating large-scale glass areas, which convey a generous sense of space. The use of double and triple insulating glass of a thickness up to 58 mm and the option of natural ventilation meet the increasing requirements for energy savings and ensure the wellbeing of users.

Projected top-hung windows and parallel-opening windows in all-glass look (SG)

• Projected top-hung window:

Vent weights of up to 180 kg
Max. vent size 1956 × 2456 mm (W×H)

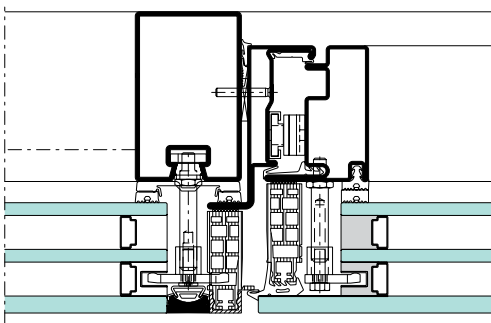
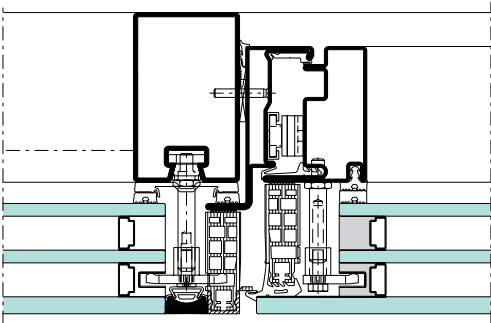
• Parallel-opening window:

Vent weights of up to 300 kg
Max. vent size 4000 × 4000 mm (W×H)

- Grid area up to a maximum of 4 m²
- Glass thicknesses of 28 to 58 mm
- Mechanical fixing of the glass to the frame – without bonding
- Mechanised option available through chain drive, no locking motors required

• CE marking in accordance with EN 14351-1

- U_f values > 1.8 W/m²K
- Watertightness class of up to 9A
- Air permeability of up to class 4
- Resistance to wind load up to class B/C 4



VISS systems

Pivot door

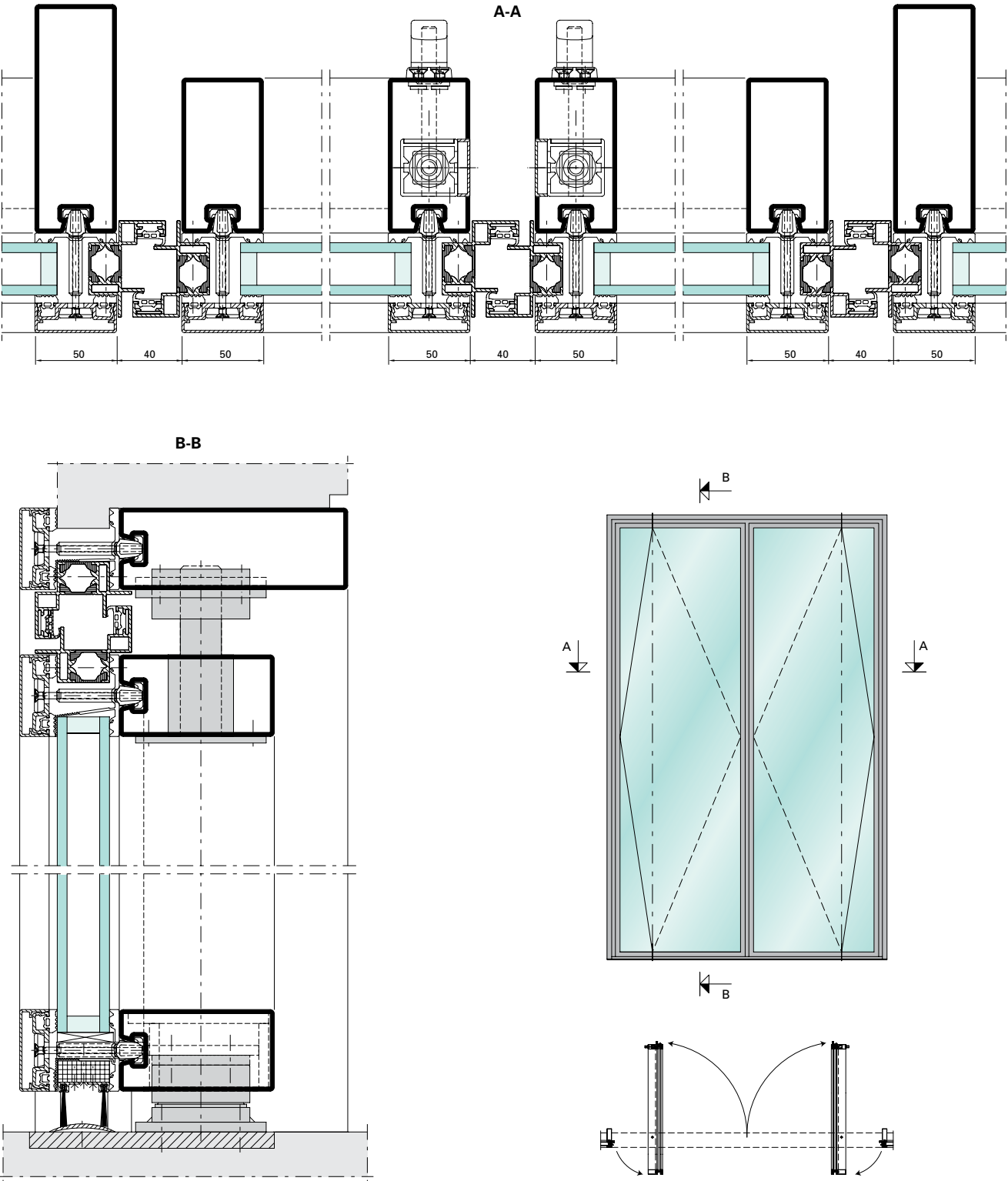
For greater generosity across the entire line

With the new VISS pivot door as a project-specific solution for floor-to-ceiling and module field doors, the generous lines of the VISS façade can now also be continued in access areas. With this development, Jansen is extending the design options for large-scale glass façades with the addition of both a visual and functional highlight.

- Large, thermally insulated pivot door for special applications and requirements (e.g. entrances to exhibition halls, atria, etc.)
- Appearance identical to the VISS façade construction
- Construction principle based on the tried-and-tested VISS façade doors
- Thermally insulated door rebate profiles available for glass thicknesses of 27 to 42 mm
- The VISS pivot door can be both outward and inward-opening, but can only be operated from the inside
- Dimension of the door and frame profiles can be freely selected or specified in accordance with the structural requirements
- Concealed espagnolette with lower and upper lock, integrated in the room-side door leaf profile
- Large selection of cover profiles allows diverse possibilities for design



Example of VISS pivot door



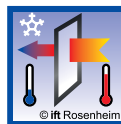
Performance characteristics

VISS façades



CE marking

Curtain wall façade tested to EN 13830.



Thermal transmittance

The profile combinations were calculated according to EN ISO 10077-2. The product achieves $U_{C_w} 0.73 \text{ W/m}^2\text{K}$.



Air permeability

Air permeability tested to EN 12153. The product achieves Class AE.



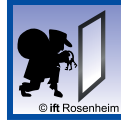
Bullet resistance

Bullet resistance tested to EN 1522/1523. The product achieves Class FB4 NS.



Watertightness

Watertightness tested to EN 12155. The product achieves Class RE 1200.



Burglar resistance

Burglar resistance tested to EN 1627. The product achieves Class RC2/RC3/RC4.



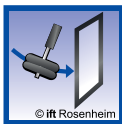
Resistance to wind load

Resistance to wind load tested to EN 12179:
 - Permissible wind load 2000 Pa
 - Safety load 3000 Pa



TRAV safety tested

The product has been tested in accordance with the German TRAV regulations (technical regulations for the use of safety barrier glazing) and meets the requirements of category A.



Impact resistance

Impact resistance tested to EN 14019. The product achieves Class E5 / I5..



CWCT test

Tested to the requirements of CWCT:
 - Air permeability/watertightness: PASS
 - Permissible wind load 2400 Pa
 - Safety load 3600 Pa



Sound reduction

Sound reduction tested to EN ISO 140-3. The product achieves $R_w = 45 \text{ dB}$.

Certification programmes for sustainable building

Contemporary architecture is committed to sustainability. It is not only for public buildings that the requirements in terms of ecological standards have increased considerably in recent years. The sustained building trend is also increasingly finding expression in relation to newbuilds, residential properties and renovations.

The focus is on efficiency and awareness in the use of natural resources. Today binding evidence of the environmental compatibility of a building is already being requested in many project specifications. In particular, the extraction of raw materials, transport, manufacturing, fabrication, usage phase and recycling of a product are considered.

The eco-friendliness of a building is examined on the basis of different certification programmes. Together with ecological aspects, in most cases the topic of sustainability is also evaluated in respect of sociocultural and economic requirements.

- Minergie-Standard (Switzerland)
- Quality Seal of the German Sustainable Building Council (DGNB)
- BREEAM (Building Research Establishment Environmental Assessment Method)
- LEED (Leadership in Energy and Environmental Design)
- Klimaschutz und Energieeffizienz Schweiz (Certificate from the Energy Agency of the Swiss Private Sector)

Timeless steel - sustainable use for generations

Steel offers an extraordinarily high recycling potential and its lifespan is unsurpassed in comparison to alternative materials. Windows, doors and façades made from steel and stainless steel fulfil these requirements in peerless fashion and therefore guarantee sustainable construction and ecological use of buildings.

For increased sustainability with a profile: Environmental Product Declarations (EPDs)

With its profile systems, Jansen makes a substantial contribution to the successful certification of a building. The evidence provided for the adherence to ecological guidelines can be used by the fabricator as the basis for obtaining their own manufacturer EPDs.

Environmental Product Declarations for steel/stainless steel profile systems

With window, door and façade profiles made from steel and stainless steel, Jansen provides for the sustainable design, installation, and, in particular, use of buildings. As a manufacturer of complete steel profile systems, Jansen makes industry-specific Environmental Product Declarations in accordance with ISO 14025 and EN 15804 for windows, doors and façades available to the fabricator.

The EPDs can be obtained quickly and easily from the ift test institute in Rosenheim, Germany.

System versatility: for every application

Systems	Windows	Doors	Façades	Fixed glazings	Partition walls	Conservatories	Fire protection	Thermal insulation	Safety	System specifications
Janisol/Janisol Primo Basic depth of doors 60 mm Basic depth of windows 60/64 mm	◆	◆		◆	◆	◆		◆	◆	Doors and windows CE tested, anti-finger-trap door, folding wall, burglar resistance RC3 and bullet resistance, steel and stainless steel
Janisol HI Basic depth of doors 80 mm Basic depth of windows 90 mm	◆	◆		◆	◆	◆		◆	◆	Doors and windows CE tested, Minergie tested, highly insulated, windows RC3
Janisol Arte Basic depth 60 mm	◆			◆	◆	◆		◆		Windows CE tested, inward and outward opening windows, very slim face widths
Janisol 2 Basic depth 60 mm/70 mm		◆		◆	◆		◆	◆	◆	Doors and fixed glazings, fire resistant tested EI30, smoke protection, burglar resistance, steel and stainless steel
Janisol C4 Basic depth 70 mm		◆		◆	◆		◆	◆		Doors and fixed glazings, fire resistant tested EI60 and EI90, smoke protection
VISS TV Face width 50/60 mm			◆		◆	◆		◆	◆	Mullion-transom construction for vertical glazings, dry glazing, CE tested, burglar resistance RC4 and bullet resistance
VISS TVS Face width 50/60 mm			◆		◆	◆		◆	◆	Mullion-transom construction for vertical and roof glazings, dry glazing, CE tested, burglar resistance RC4 and bullet resistance
VISS Fire Face width 50 mm			◆		◆		◆			Mullion-transom construction for vertical and roof glazings, tested for fire resistance to E90/EI90
VISS SG Face width 50/60 mm			◆		◆	◆		◆		Structural Glazing façade based on the tried-and-tested VISS system
VISS Basic / VISS I _{tra}			◆		◆			◆	◆	Construction for steel and stainless steel façades for mounting on any support
Jansen-Economy 50 Basic depth of doors 50 mm Basic depth of windows 50/58,5 mm	◆	◆		◆	◆		◆		◆	Doors and windows CE tested, anti-finger-trap door, fire resistant tested E30, smoke protection, burglar resistance, steel and stainless steel
Jansen-Economy 60 Basic depth 60 mm		◆		◆	◆		◆		◆	Doors CE tested, anti-finger-trap door, fire resistant tested E30, smoke protection, burglar resistance and bullet resistance
Standard profiles Basic depth 40, 50, 60, 80 mm	◆	◆		◆	◆					Steel profile series for double action doors, frame doors and pilaster profiles
Folding and sliding doors Basic depth 50, 60, 80 mm										Steel profiles for folding and sliding doors, automatic or manual folding, CE tested



Jansen AG

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Schweiz
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Configure to Inspire