

SWISSRAILING FLAT

Technical information for planning and realisation





Visually Compelling – Technically Unique

The key technical feature of SWISSRAILING FLAT is that, although the support structure is invisible, it is extremely simple to install. This is achieved by having the glass element structurally bonded to the carrier profile already at the factory.

Fitting the wall profile to either concrete or to a steel or wood structure for example always takes place within certain tolerances. In order to ensure a perfect fit, there is a fine-adjustment facility by means of a ± 5 mm stepless adjustment of the clamping profile between the glass and wall profile. The result – a guaranteed perfectly aligned upper exposed glass edge.

To sum up

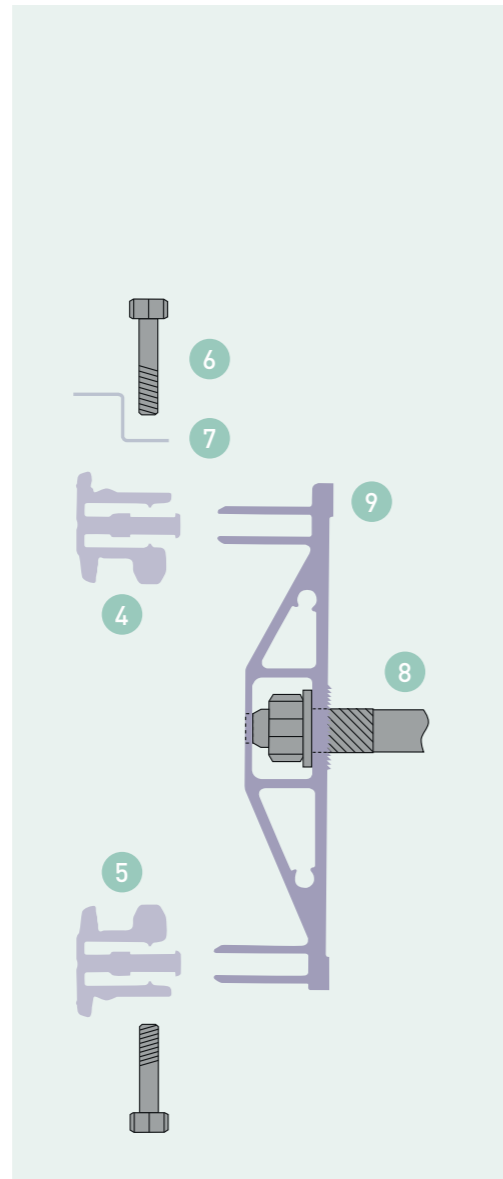
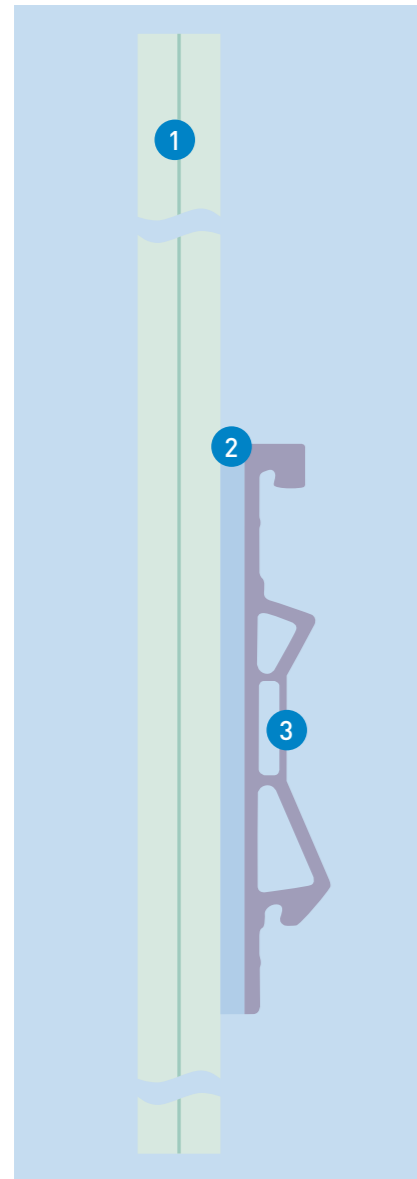
- Flush-mounted all-glass appearance with exposed glass edge to satisfy the most discerning aesthetic demands
- A wealth of design possibilities with SWISSLAMEX laminated safety glass
- Individual execution to customer-specific requirements
- Tested complete system with certification including different anchoring options
- Simple, precise installation with high repeat accuracy
- No externally visible support structure
- For internal and external applications
- Fall-proof subject to compliance with all Swiss standards, German code (DIN 18008) and extensive testing for residual strength criteria's



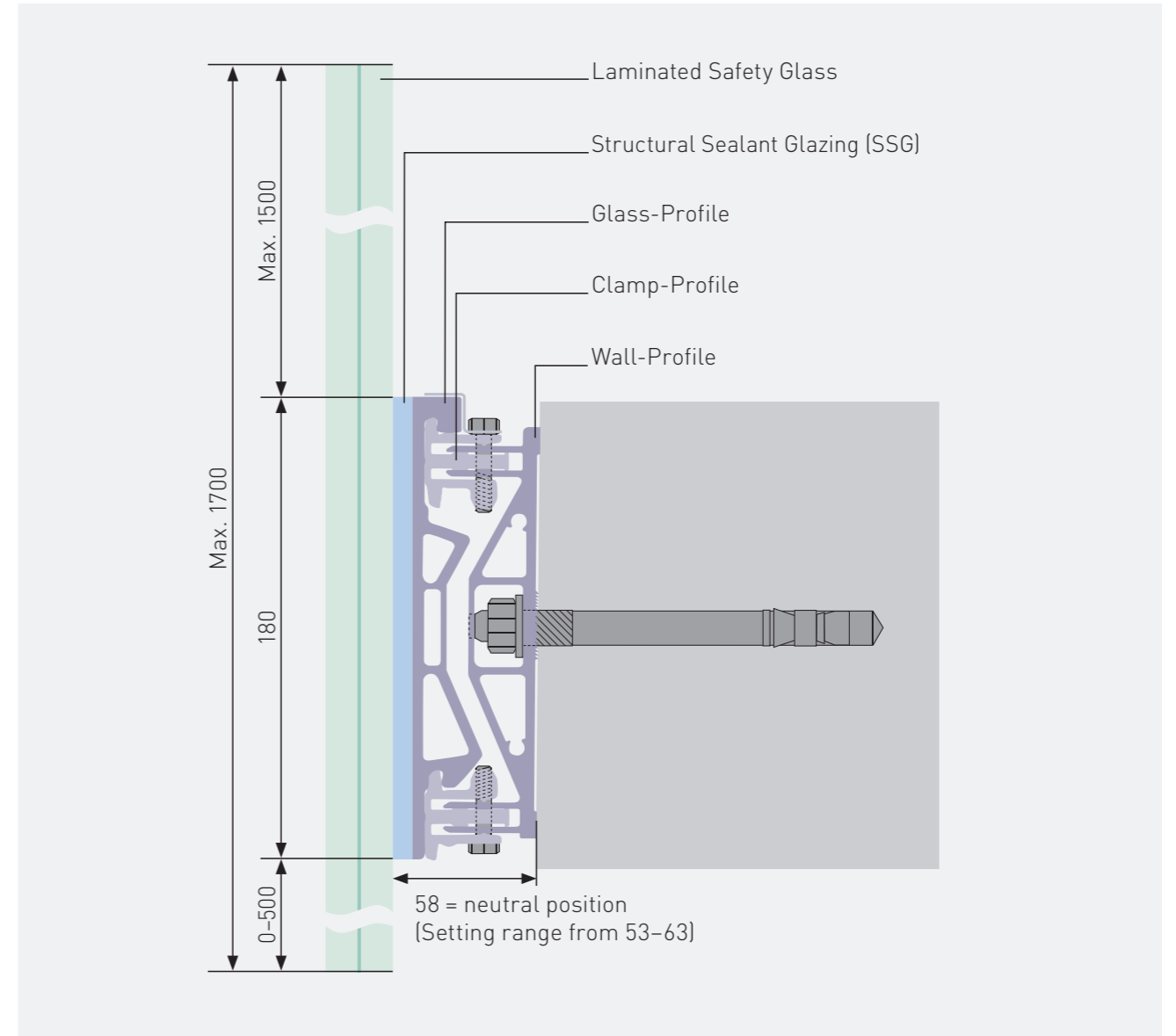
The system in detail

When the glass elements are being produced in the factory, the pre-assembly components can be ordered in advance from stock.

Assembly takes place at the factory Components for on-site assembly



- 1 glass unit
- 2 factory bonded connection
- 3 carrier profile
- 4 upper clamping profile
- 5 bottom clamping profile
- 6 special assembly screw
- 7 uplift fixation
- 8 dowel
- 9 wall profile



- Fixing of the wall profile to the concrete construction is integrated in the type static calculations of the balustrade system. The following criteria must be complied with:
 - Minimum concrete strength C20/25
 - Use of the prescribed anchor type from Fischer (stainless steel A4, Fischer FAZ II - M12 or Fischer FHB II M12) depending on load category
 - Edge distances in accordance with Glas Trösch specifications
 - The wall profile is pre-drilled at 200 mm intervals, the position of the anchor plugs is prescribed by Glas Trösch in the form of a table

- Fixing of the wall profile to any desired support structure:
 - Glas Trösch provides detailed information on the forces occurring in the unit kNm/m (for the fixing moment) and kN/m for the shear forces
 - Based on this information, the on-site support structure can be statically checked (load application, deformation, load transmission)
 - The M12 connecting bolt, A4 stainless steel, strength class K700, can always be used as a general principle; this is verified by Glas Trösch within the scope of the system statics.
 - Substructure made of wood or steel needs to be checked by others

Powerful arguments

Custom-designed

Design attributes that satisfy the most discerning aesthetic requirements.

- flush-mounted with minimal profile dimensions
- exposed upper glass edge
- concealed support structure and anchorage points (mounting brackets, anchor plugs, shims, etc.)

Variable visual glass design

- matt and white films for translucency customisation
- extensive range of coloured PVB films
- COLORPRINT ceramic digital printing for individual motifs
- colour-coordinated ceramic strips for concealing the support structure
- white glass

Dimensions with individual options

- minimum glass dimensions: 0,64 m × 1,10 m
- maximum glass dimensions: 9,00 m × 1,70 m (heights over 1,70 m on request)

Planning made easy

Calculation tool and CAD data blocks minimise the planning effort.

- Planning documentation will be provided by Glas Trösch
- Optimisation of structural components with the help of the type static calculation
- Automated production of the materials list with the calculation tool
- The system solution satisfies all necessary standards and guidelines

Simple order and delivery process

- The order comprises of the complete system solution with coordinated system components
- Standard components are available from stock
- Transparent cost structure because all necessary components are integrated
- Optimised logistics – just-in-time delivery direct to the construction site

Installation according to instructions

Installation-friendly because the lightweight components are fixed first and then the glass is inserted in the pre-mounted support structure.

- Precise installation of the entire system thanks to clear installation instructions
- The preassembly of the wall profile takes place on the scaffolding
- The continuous wall profile serves as a drilling template
- The system can cope with building shell tolerances of ± 20 mm
- The insertion of the glass and the final alignment take place from above
- The clamping profiles can be steplessly adjusted at the time of installation. This enables perfect alignment of the sheets of glass
- No mechanical processing is called for on the building site
- All system components are predrilled at the factory
- All necessary components are supplied including anchor plugs (for concrete)

Well worth knowing

- Defective glass elements can be easily replaced
- Glass as a building material is resistant to weathering and acid as well as being easy to clean



Glas Trösch – Your supplier partner

When you work with Glas Trösch, you get more than a solution – we offer our customers a comprehensive package with every order.

Advice

Give us a call! Our technical specialists will support you with their know-how and experience. We will be happy to explore the boundaries with you and develop unique solutions.

Quality

SWISSRAILING FLAT is made in Switzerland. The core element, the structural bonding, is carried out at the factory and is subject to strict quality criteria.

We grant a system warranty on the basis of a signed installation record.

Service and proximity

Thanks to the proximity of our processing facilities, we are quickly on the spot. Long-term availability of all system components

