Forster Profile Systems
Creative Solutions in Steel
Front page picture:
Huawei Exhibition Center, Peking, China
Thermal insulated mullion/transom curtain walls, glazings and entrance doors with the systems Forster thermfix vario and Forster unico

Photo right:
Prime Tower, Zurich, Switzerland
Fire protection doors EI30, smoke protection doors E30 from Forster fuego light and Forster presto systems
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Impressive solutions in steel and stainless steel

At its location in Arbon in Switzerland, Forster develops and produces high-quality profile systems for a variety of applications:

- Thermally insulated doors and windows
- Curtain walls and glazed roofs
- Doors and windows without thermal break
- Fire and smoke protection closures
- Security doors and windows (burglary, bullet resistance)

Besides full support from our technical advisers, we provide architects, planners and metal-construction companies with detailed documentation and practical digital aids to help them complete their design and implement the systems.
The Forster systems

Windows, doors and curtain walls

Forster offers profile systems for a variety of different requirements and needs. Our systems are continuously updated and expanded by innovations to meet the latest demands of the market.

Forster fuego light
For fire protection doors and glazing at the highest quality level. Many different solutions are tested and approved in numerous countries. Design variants range from single and double-leaf doors through to large-surface sliding doors. The system is convincing due to its very narrow sightline, slender looks and extreme transparency.

Forster unico / Forster unico Hi
Thermally insulated windows, doors and glazings – elements, produced with profiles in this unique framework style, can be fitted indoors or outdoors. The ecological basic profiles are made of 100% recyclable steel and contain no synthetic insulating materials. The clever fastening techniques achieve extremely narrow profile cross-sections previously unattainable with thermally insulated series. This system is therefore ideal for renovating old buildings and listed industrial buildings.

Forster thermfix vario
System for thermally insulated curtain walls based on a mullion/transom construction has a multifunctional use that is combinable with noise reduction, fire protection and burglary resistance. Very narrow facing widths from 45 mm permit a wide range of applications.

Forster thermfix light
Curtain walls and fixed glazing are simple, quick and economic to install with free choice of substructure. This makes fitting a weatherstripping system simple on commercially available steel and aluminium profiles or wooden substructures. Also ideal for sloped or glazed roofs.

Forster presto
For flush mounted single or double-leaf doors, windows and glazed closures. Forster presto stands for security and safety and meets maximum demands for technical functionality and extreme long-term exposure to stress. The system is suitable for use wherever there are no special thermal insulation requirements. Forster presto is also available in stainless steel for elegant and ambitious solutions.

* Refer to country-specific approvals
Safer – slender – individual

Freedom of design with profile systems made of steel

Profile steel tubes are an optimal construction element for doors, windows and curtain walls for structural reasons. Large-surface elements with extremely narrow face widths can be produced from steel and stainless steel, which is otherwise not possible with other materials. In many respects, steel as a basic material is a reliable partner, in particular for our Forster profile systems:

- Elegant, transparent, lightweight and slim constructions
- Impressive element dimensions – the structural properties of steel make this possible
- Many varied forms, curved in elevation or in plan
- Easy to combine with materials such as concrete, glass, membranes and wood
- Offers many fitting options
- Durable and economic
- Ecological and sustainable, 100% recyclable
- Ideal for renovations
Steel, the recycling champion

Steel is the material with the highest recycling rate in the whole world. Even when adding up all other materials together, such as aluminium, glass and paper i.e. materials that are recycled in larger quantities, the quantity of recycled steel is far greater. 570 million tonnes of steel scrap per year – that is 60 times the quantity of recycled aluminium, for example. Steel is the world’s recycling champion by a long margin!

The ecological footprint of steel is smaller than previously estimated due to its multi-recycling properties. At the same time, material quality is retained in every new product cycle. These are the findings of a study performed by the Technical University of Berlin under the direction of Prof. Dr. Matthias Finkbeiner. For the first time, it presents a holistic and comprehensive life cycle assessment methodology for steel. (Source: Steel Information Centre, www.stahl-online.de)

Together with members of the VFF (Association of Window and Façade Manufacturers, Frankfurt), we commissioned ift Rosenheim to produce EPDs (Environmental Product Declarations) in compliance with DIN ISO 14025 and EN 15804 for windows, doors and curtain walls made of steel and stainless steel. You may use these EPDs as the basis to obtain your own manufacturer EPDs which can then be used for building identification.
Beautiful down to the smallest detail

Nothing to see

Safety need not be ugly or bulky. Slender profiles made of steel, concealed hinges and integrated door closers (ITS) reduce the number of visible elements to a minimum and give doors, glazing and curtain walls a clear, elegant look.

The latest development in fire protection hides its capabilities behind glass. Elements in an all-glass look, whether clad with glass on one or both sides, offer proven Forster safety and a modern, elegant design. Only a completely smooth glass surface remains next to the handle.

Generous glass elements for fixed glazing up to 3.5 m high can be aligned in a row with a minimum gap. Fire resistant butt joint glazing which is definitely eye-catching with no transoms.

With our profile systems you receive door elements with a uniform appearance within the entire building. For both fire resistant, smoke controlling and heat insulating, the identical face widths of the various systems guarantee a uniform appearance.
Energy efficiency

Ecological heat insulation

Our Forster unico system needs no additional synthetic insulating materials. The profile system made completely of steel meets the highest demands for technical and structural functions due to its unique framework style of construction. An ideal combination of the latest technology, energy efficiency and ecological use of materials for responsible and sustainable building.

Forster unico lets you construct doors, windows and glazing for outdoors, no matter whether you are planning a modern new building or renovating an historic building. Of course it is not only combinable with thermal insulation but also with fire protection, and/or burglary/bullet resistance.

Thermally insulated curtain walls with an impressive element size can be achieved using Forster thermfix systems. They are variable and multifunctional and on request meet additional requirements regarding fire protection, burglary or bullet resistance.

Our systems for thermally insulated elements

Forster unico / Forster unico Hi
Thermally insulated windows and doors in steel and stainless steel

Forster thermfix vario
Forster thermfix light
Thermally insulated curtain walls in steel and stainless steel
Thermally insulated door elements with round arches from Forster unico profiles – Renovation of a mansion in Küsnacht, Switzerland
Over 1,100 Forster unico window elements with glass panels up to 3.1 m high – in the new Edificio Mediapro at the Audiovisual Campus, Barcelona, Spain
Thermally insulated windows, doors and glazing
using Forster unico – Hotel Crowne Plaza, Liège, Belgium

Curtain wall and glazed roof in the fully restored ‘Limonaria’ using Forster thermfix vario – Museum Stibbert, Florence, Italy
Our universal design systems

**Forster unico / Forster unico Hi**
Anti-finger trap door with escape route function, insulated barrier-free threshold

**Forster fuego light**
Barrier-free sliding door EI30 with no threshold with/without escape route function, anti-finger trap door EI30, side-hung door with free-running function

Barrier-free accessibility and finger protection

Current requirements for insulated access without thresholds, automatic or easy to open doors also play a major role for us and so are included in our standard portfolio. The construction variants range from single-leaf doors through to large-surface sliding doors and escape doors with anti-panic function (full panic or partial panic) or swing-out function.

Our anti-finger trap doors, designed in single or double-leaf versions, offer a reduced risk of injury and come with numerous other protection features.

Finger protection DIN 18650
Barrier-free accessibility DIN 18040
Escape routes EN 179/EN 1125
1 mn cycles EN 12400
CE-marking EN 14351-1
Barrier-free fire resistant sliding door EI30 using the Forster fuego light system – City West, Chur, Switzerland.

Fire resistant glazing EI30 and EI60 / automatic fire resistant sliding doors EI30, IKEA St.Gallen, Switzerland.

Barrier-free fire resistant sliding door EI30 using the Forster fuego light system – City West, Chur, Switzerland.
Fire resistant door EI30 made of Forster fuego light profiles with bar knob – Federal Ministry of Labour, Social Affairs and Consumer Protection, Vienna, Austria
Safety

Fire and smoke protection

Forster Profile Systems lead in the sector of safety. Our systems have been tested and approved with success in a large number of countries. The wide range of versions allows planners a high degree of freedom of design and functionality. Despite the highest requirements, the aesthetic design aspects are not overlooked.

Close co-operation with glazing and fittings manufacturers ensure that all components are optimally compatible with each other. Forster works intensively on further developing its systems. This results in constant new tests and product line supplements.

Our systems for fire protection and smoke control

Forster fuego light
Fire resistant doors and fire resistant glazing
EI30/EI60/EI90/EI120
Fire resistant sliding doors EI30 with/without escape route function
Sheet metal clad tubular frame doors
EI30/EI60

Forster presto
Doors and fire resistant glazing
E30-E120/EW30-EW60 (DE: RS/G30)

Forster thermfix vario
Fire resistant glazing EI30/EI60/EI90/
EI30-E120/EW30-EW60 (DE: G30)

Forster thermfix light
Sloping fire resistant glazing EI30/EI60/ EW60

* Refer to country-specific approvals
Fire resistant doors and closures EI30 using Forster fuego light – The Dolder Grand ****, Zurich, Switzerland
Fire-resistant doors and curtain wall EI30 using Forster thermivario and Forster fuego light – Wildbachgut residential building, Zurich, Switzerland
Fire resistant curtain wall EI60 using Forster thermfix vario in stainless steel – Helsana / 2SIDES, Dübendorf, Switzerland

Fire and smoke protection doors EI30 in steel using Forster fuego light – BMW Welt, Munich, Germany
Security

Burglary and bullet resistance

The need for security in the past few years has risen immensely and this is reflected by more stringent system requirements for doors, windows and curtain walls.

Our profile systems in steel or stainless steel cover a wide range for increased security indoors and outdoors. Our doors, windows and glazing have proved to be one of the best world-wide, in particular when it comes to burglary and/or bullet resistance. The same visual appearance for different security areas offers a maximum in aesthetic design and inconspicuous integration in the overall architecture.

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**Our systems for burglary resistance**

**Forster unico** / **Forster unico Hi**
Thermally insulated windows and doors in steel, stainless steel WK1/RC 2-3 according to EN 1627-1630

**Forster thermfix vario**
Mullion/transom curtain wall WK1/RC 2-3 according to EN 1627-1630

**Forster fuego light**
Doors WK1/RC 2-3 according to EN 1627

**Forster presto**
Doors WK1/RC 2-3 according to EN 1627-1630

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**Our systems for burglary resistance**

**Forster unico** / **Forster unico Hi**
Thermally insulated window and door systems FB4 NS according to EN 1522

**Forster thermfix vario**
Thermally insulated mullion/transom curtain wall FB4 NS according to EN 1522

* Refer to country-specific approvals
Burglar resistant display window glazing WK3 using Forster thermfix vario – Sotheby’s, Zurich, Switzerland
Fire resistant doors and closures and burglar resistant doors WK3 Forster presto and Forster fuego light – Finance Centre in Aachen, Germany

Burglary and bullet resistant doors and glazing RC3/FB4 using Forster unico and Forster thermfix vario – Belgian Embassy, Athens, Greece
Thermally insulated windows and glazing, burglar resistant using Forster thermfix vario and Forster unico.
KBA NotSys SA, Lausanne, Switzerland.
Your partner

On the safe side

Tested and approved
Forster systems have been tested and approved in many countries for fire and smoke protection as well as burglary and bullet resistance.

Support and assistance
A number of technical aids are available to you for our Forster profile systems. Our technical advisers support you in planning your projects. They are delighted to help you with questions and doubts to facilitate your work.

Time-saving
Forster systems feature short processing times and offer a large number of aids for cost-effective production. This not only saves money but also gives you peace of mind.

Ecological
Steel and stainless steel are durable and are made of 100% recyclable materials. Forster Profile Systems is certified to the Environment Management System ISO 14001:2004.

Safe – slender – innovative
Our development team works constantly on new innovative solutions for you to meet both functional and visual requirements.

You will find more information about us and our profile systems on our website at www.forster-profile.ch or simply contact one of our advisers in your vicinity. We always have an open ear for you.
Services

Besides comprehensive technical information in brochures and application catalogues, Forster offers a wide range of services:

**Project consulting**
- Highly trained technicians are available to advise you on projects, designs and detailing
- Assistance in drafting specifications
- Project-specific solutions

**Tender specifications**
Our website also contains numerous tender specifications on our profiles and end products.

**CAD profile catalogue**
The latest version of the CD-ROM contains the individual system components as well as entire system drawings in DWG format.

**U-value calculator**
The easy to understand program calculates the U-values (heat transfer coefficient) of complete components, such as doors, windows and façades, to EN ISO 10077-1:11.2000 using a database as a source. Likewise it is possible to selectively describe and calculate complex building units – a simple and helpful design tool.

**Design and processing information**
CD-ROMs with all the latest documentation on Forster systems in PDF format are available for designers and manufacturers.

www.forster-profile.ch
The Forster website download section includes all product information as well as an extensive reference database, all specification texts and PDF documents and much more useful information.

**CE marking**
Our website, www.forster-profile.ch also contains extensive information on CE marking:
- Curtain walls to EN 13830
- Windows and external doors to EN 14351-1
Forster profile systems in steel and stainless steel

Thermally insulated windows and glazing using Forster unico – Rustoord Ancrosite, Wilsele, Belgium

Fire resistant doors and closures EI30 using Forster fuego light – Piscine les Argoulets, Toulouse, France

Thermally insulated doors Forster unico and Forster thermfix light façades – Autohaus Kamper, Neusiedl am See, Austria