Doors, windows and glazing

with thermal break
in steel and stainless steel

Vineyard von Winning, Restaurant Leopold, Deidesheim, Germany
Thermal insulated doors and windows
Energy efficient windows, doors and screens

**SUSTAINABLE, ECOLOGICAL, 100% STEEL.** forster unico is the revolutionary, thermally insulated profile system for single and double-leaf doors, for windows as well as for exterior glazed units. The basic profiles comprise 100% recyclable steel and contain no synthetic insulating materials – in contrast to all other insulated systems. This innovation, uniquely evocative of a framework style of construction, satisfies the most stringent demands relating to physical and structural functions.

The impressive slim aspects of window elements combine architectural design, comfort and well-being with excellent heat and sound insulation.

This is the latest technology, energy efficiency, attractive design and the ecological use of materials for a responsible and sustainable construction.

**forster unico Hi**
forster unico Hi combines all the benefits of standard forster unico systems with even higher insulation parameters. The system complies with the latest requirements for heat protection, e.g. EnEV 2009 (DE) and SIA 380/1 (CH). Simple construction: Only two additional components are needed to make forster unico into a very efficient heat insulating forster unico Hi element.

### Technical details

**Material options**
- Steel bright / steel galvanized / stainless steel, grinded, grain 220-240

**Performance specifications***
- Thermal insulation forster unico: \( U_{w} > 1.4 \text{ W/(m}^2\text{K)} \)
- Thermal insulation forster unico Hi: \( U_{w} \leq 0.9 \text{ W/(m}^2\text{K)} \)
- Sound insulation up to 47 dB (doors and glazings)
- Burglar resistance RC 1-3 acc. to EN 1627
- Burglar resistance RC 4 acc. to EN 1627 for fixed glazings
- Bullet proof FB4 according to EN 1522
- Certified according to EN 14351-1 (CE marking)
- Finger protection door according to DIN 18650
- Fire protection E30 / EW30 (doors and windows)
- SHEVS acc. to EN 12101-2 for side-hung and tilt-only windows

**Fittings**
- System fittings for doors up to 350 kg leaf weight, windows up to 150 kg
- Concealed Forster system fittings for both single and double casements of side-hung and turn/tilt windows

**System properties**
- Facing widths of frame profiles 30 - 90 mm
- Narrowest facing widths for single and double vent casements from 62 mm and fixed glazings from 30 mm
- Compatible with Forster fire and smoke protection systems
- Fillings up to 60 mm (triple insulation glass)
- Wet and dry glazing, stress-relieved and drained
- Stove enamelling or powder coating with no temperature restrictions
- 1- and 2-leaf lift-up sliding doors
- Insulated flush floor threshold, barrier-free accessibility (0 mm)
- Outward opening windows, tested according to BS6375-1
- Parallel slide and tilt windows (PST)

*Refer to country-specific approvals

*Villa Promiska, Switzerland*
Thermal insulated doors with arches