

# Doors, windows and fixed glazing

with thermal insulation  
in steel and stainless steel



*Les Atelier des Capucins, France  
Thermally insulated doors and glazing*

## Energy-efficient windows and doors

forster unico is a revolutionary profile system made of steel for single-leaf and double-leaf doors, windows and fixed glazing in outdoor applications. The basic profiles consist of 100% recyclable steel and do not contain any synthetic insulating materials – unlike conventional insulated systems. The unique framework construction meets the highest requirements for technical and physical properties relevant to building.

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

Contemporary technology, energy efficiency, aesthetics and the environmentally friendly use of materials ensure responsible and sustainable construction.

### forster unico Hi

forster unico Hi combines all the advantages of the standard system forster unico with even higher insulation values. The system meets heat protection requirements such as EnEV 2009 (DE) and SIA 380/1 (CH). Implementation is child's play – only two components are additionally required to turn forster unico into a highly thermally insulated forster unico Hi element.

### Technical specifications

Material variants	Bright steel, steel zinc magnesium, brushed stainless steel
Face widths	Door leaf with frame from 80 mm
	Window and overlapping casement with frame from 92 mm
	Fixed glazing from 30 mm
Fittings	Attached and concealed flush fittings (max. opening angle on window 90°), historic fittings Max. leaf weight 410 kg (door), 150 kg (window)
System features	Design variants: Side-hung door with single/double leaf, with optional sidelight and fanlight Flush sheet metal door Turn/tilt and turn/tilt windows, single or double leaf Fixed glazing
	Structural depth from 70 mm
	Design glazing beads in aluminium and steel
	Wet and dry glazing
Performance characteristics*	CE marking according to EN 16034 and EN 14351-1
	Thermal insulation: Door $U_D$ up to 0.9 W/(m <sup>2</sup> K) Window $U_W$ up to 1.0 W/(m <sup>2</sup> K) Fixed glazing $U_{Wf}$ up to 0.63 W/(m <sup>2</sup> K)
	Fire protection EI30, EW30, E30 according to EN 1634-1
	Smoke protection $S_a$ or $S_{200}$ according to EN 1634-3
	Durability of self-closing properties Door: Class 8 according to EN 12400 (tested up to 1 million cycles according to EN 1191 with automatic door opener) Window: Class 2 according to EN 12400 (10,000 cycles according to EN 1191)
	Resistance to wind loads: Class C3 / B3 (door) and C5 / B5 (window) according to EN 12210
	Burglary resistance RC2 and RC3 according to EN 1627
	Watertightness Class 3A (door) and E 1050 (window) according to EN 12208
	Air permeability Class 4 according to EN 12207
	Impact resistance Class 1 (door) and 3 (window) according to EN 13049
	Barrier-free according to DIN 18040
	Sound insulation up to $R_w = 46$ dB (door) and $R_w = 47$ dB (window) according to EN ISO 140-3

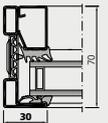
\* Take note of the country-specific approvals



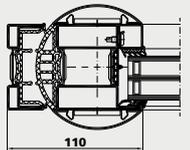
**MINERGIE®**



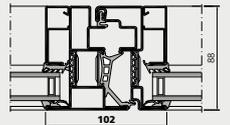
Fixed glazing



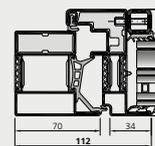
Anti-finger-trap door



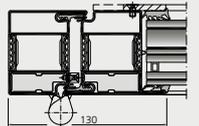
Window leaf



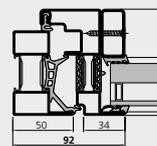
Window FB4



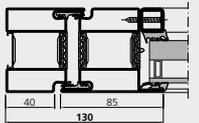
Door FB4



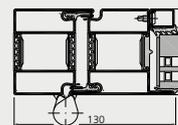
Window RC1-RC3



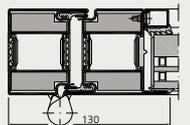
Door RC1-RC3



Door E30 / EW30 / S<sub>200</sub>



Door EI30 / S<sub>200</sub>



La Samaritaine Paris, France  
Thermally insulated windows



*Cantonal Museum of Fine Arts (MCBA), Lausanne, Switzerland  
Thermally insulated fixed glazing in stainless steel*

928352/10013173/02-23