

# Doors, windows and glazing

with thermal break  
in steel and stainless steel



*Les Atelier des Capucins, Deidesheim, France  
Thermal insulated doors and glazing*



## Energy efficient windows, doors and screens

forster unico is a revolutionary profile system made of steel for single- and double-leaf doors, for windows and for exterior glazings. 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 building physics functions.

Slim elevations of the window elements combine architectural design, comfort and well-being with excellent heat and sound insulation.

This is the latest technology, energy efficiency, aesthetics and environment-friendly use of materials for 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 the latest requirements of heat protection such as EnEV 2009 (DE) and SIA 380/1 (CH). Simple: 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
	Sound insulation according to EN ISO 140-3: Door: up to $R_W = 46$ dB   Window: up to $R_W = 48$ dB
Face widths	Door leaf from 90 mm
	Window sash from 62 mm
	Fixed glazing from 30 mm
Fittings	Attached and concealed flush fittings
	Max. leaf weight: Door: up to 410 kg   Window: up to 150 kg
	Wet, dry glazing, standard
	Aluminium glass retaining strips 2.5-50mm and steel 2.5-50mm, various design versions available
System characteristics	CE-identification according to EN 16034 and 14351-1
	Design variants: Doors 1- or 2-leaf with sidelight and fanlight, turn/tilt windows 1 or 2-leaf, fixed glazing
	Special features: Minergie certified, insulated door threshold
Performance characteristics*	Fire protection EI30, EW30, E30 according to EN 1634-1
	Smoke protection: Doors Sa or S200 according to EN 1634-3
	Continuous function test doors: C5 according to EN 13501-2 (up to 1 million cycles tested according to EN 1191 with automatic door opener)
	Window: Class 2 according to EN 12400 (10,000 cycles EN 1191)
	Doors for escape and emergency routes (partial and full panic system) according to EN 179 and EN 1125
	Burglar resistance: RC2/RC3 according to EN 1627
	Bullet resistance: FB4 NS according to EN 1522
	Resistance to wind loads according to EN 12210: Door: Class C3/B3   Window: Class C5/B5
	Watertightness according to EN 12208 door: Class 3A   Window: Class E 1050
	Air permeability class 4 according to EN 12207
	Impact resistance in accordance with EN 13049: Door: Class 1   Window: Class 3
	Operating forces: Door: Class 3 according to EN 12217   Window: Class 1 according to EN 13115
	Barrier-free doors according to DIN 18040
Sound insulation according to EN ISO 140-3: Door: up to $R_W = 46$ dB   Window: up to $R_W = 48$ dB	

\* Note country-specific approvals

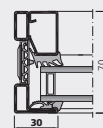




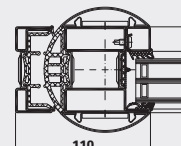
**MINERGIE®**



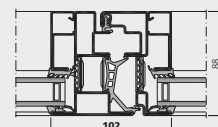
Frame / Glazing



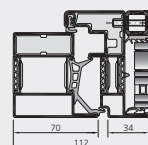
Anti-finger trap door



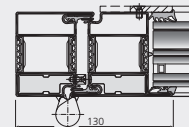
Door leaf



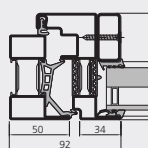
Window FB4



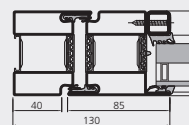
Door FB4



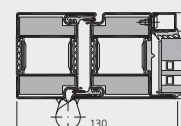
Window RC3



Door RC3



Door EI30



La Samaritaine Paris, France  
Thermally insulated windows





Lausanne Art Museum, Switzerland  
Thermally insulated fixed glazing in stainless steel

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