Curtain walls

Passiv House facades U_f = 0.49 W/(m²·K)

Security: fire protection EI30 – EI90

Burglar protection WK2–3

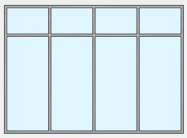
Bullet resistance FB4NS,

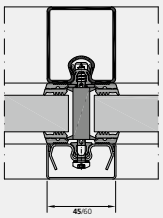
in steel and stainless steel

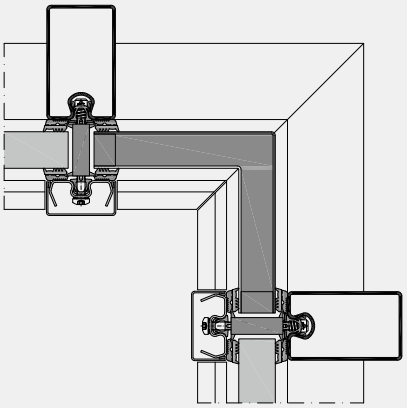
forsterthermfix®vario

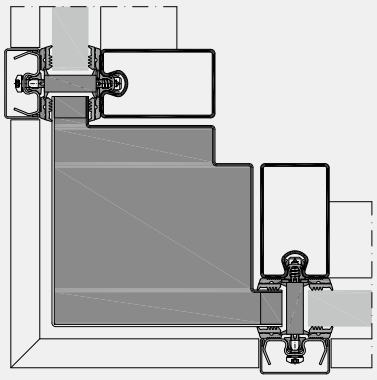
forsterthermfix®light

Psychiatrische Klinik, CH-Wil
Wärmegedämmte Pfosten/Riegel-Fassade, Türen und Fenster in Edelstahl









Technical specifications

Material variants	Strip-galvanised steel, bright steel, steel GV/BC, brushed stainless steel
Dimensions	Fixed glazing (W×H): unlimited × 5000 mm across floors
System characteristics	CE marking according to EN 13830
	Design variants: curtain wall or inner partition Corner designs in classes EI30 and EI60 up to 5 m floor height Panels up to max. 1500 × 3000 mm with glass bonding possible
	Easy installation thanks to mechanical T-joints Cover strips in aluminium and stainless steel
	Face widths: mullion/transom profile in 45 and 60 mm
	Structural depth: 50–150 mm
	Max. filling weight: 500 kg
	Max. filling element thickness: 70 mm
	Glazing: dry glazing
Performance characteristics	Heat penetration: U_f > 1.5 W/(m²K)
	Fire resistance EI30/EI60/EI90/E30/E60/E90/EW30/EW60 in accordance with EN 1364-3 Fire resistance 60/90/120 minutes according UL 263 & ULC-S101
	Burglary resistance WK2 / WK3 in accordance with EN 1627
	Bullet resistance FB4 NS in accordance with EN 1522 as a commercial solution
	Explosion resistance EPR1 (S) in accordance with EN 13123-1 as a object solution
	Resistance to wind load in accordance with EN 12179; 3 kN/m², safety glass 4.5 kN/m²
	Watertightness in accordance with EN 12155: RE1200
	Air permeability in accordance with EN 12153: AE (>600)
	Impact resistance in accordance with EN 14019: I5/E5
	Sound insulation up to R_W = 45 dB according to EN ISO 140-3

Take note of the country-specific approvals

forster thermfix vario

Facades for fire protection and more

The system forster thermfix vario is a thermal insulated mullion and transom construction, based around a dry glazing security application system for fire, burglar and bullet protection. Corner designs tested in fire protection and bonded glass to panels up to a size of 1500 × 3000 mm create additional applications for all facades with high heat insulation and in line with safety requirements.

The internal side profiles made from steel or stainless steel take the load bearing function. Thanks to excellent static properties, impressive field sizes are possible with very narrow profile face widths of only 45 mm.

Thermally insulated doors and windows from the systems forster unico and unico XS can be integrated into the facade.

Lindehoeve social care centre, NL-Mookhoek
EW60 fire resistant glazing, EW60 doors

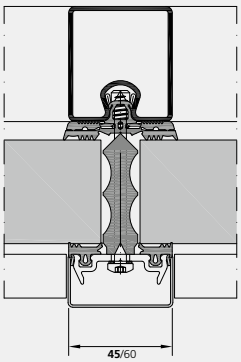
HiLo research and innovation unit, CH-Dübendorf
Highly thermally insulated mullion/transom facade, plus tilt windows and doors (forster unico)

forsterthermfix.varioHI

Curtain wall Hi

An aesthetic masterpiece designed to meet the Passive House standard. The forster thermfix vario Hi curtain wall meets the highest Passive House efficiency class phA and therefore offers excellent thermal insulation. The steel profile system can be used to create impressive field sizes – even for very slim profiles with a width of 45 or 60 mm. Since the Passive House-certified system is based on the forster thermfix vario standard mullion/transom construction, many components can be used across systems. This means that different requirements for burglary resistance or fire protection can be taken into account while retaining the same appearance across the entire curtain wall.

Ideally, the curtain wall system can be combined with the forster unico, forster unico XS and forster omnia profile systems to take into account window and door components with suitable thermal insulation requirements.



Technical specifications

Material variants	Strip-galvanised steel, bright steel, steel GV/BC, brushed stainless steel
Dimensions	Fixed glazing (W×H): unlimited × 5000 mm across floors
System characteristics	CE marking according to EN 13830
	Design variants: curtain wall or inner partition
	Passive House certified Easy installation thanks to mechanical T-joints Cover strips in aluminium and stainless steel
	Face widths: mullion/transom profile in 45 and 60 mm
	Structural depth: 50–250 mm
	Max. filling weight: 500 kg
	Max. filling element thickness: 70 mm
	Glazing: dry glazing
Performance characteristics	Heat penetration: U_f > 0.49 W/(m²K) mullion/transom U_{cw} > 0.6 W/(m²K)
	Resistance to wind load in accordance with EN 12179; 3 kN/m², safety glass 4.5 kN/m²
	Watertightness in accordance with EN 12155: RE1350
	Air permeability in accordance with EN 12153: AE (>600)
	Impact resistance in accordance with EN 14019: I5/E5
	Sound insulation up to R_W = 45 dB according to EN ISO 140-3

Note country-specific approvals and requirements

EPD
Environmental
Product
Declaration

U_f 0,49 W/(m²·K)

cool, temperate climate

phA

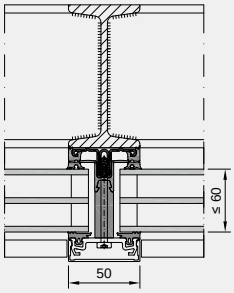
CERTIFIED COMPONENT
Passive House Institute

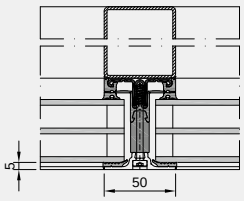
forsterthermfix light

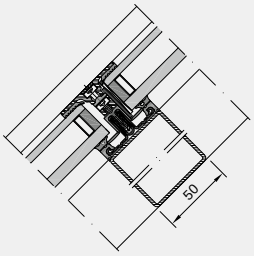
Curtain wall with attachment profiles

Whether as a curtain wall or sloped glazing, forster thermfix light offers planners and architects a high degree of design freedom thanks to the free selection of the substructure. The system allows for the uncomplicated attachment of a sealing system on commercially available steel and aluminium profiles, and wooden constructions.

Ideal combination elements can be found in the forster unico, forster unico XS and forster omnia profile systems, for example, for thermally insulated windows and doors.





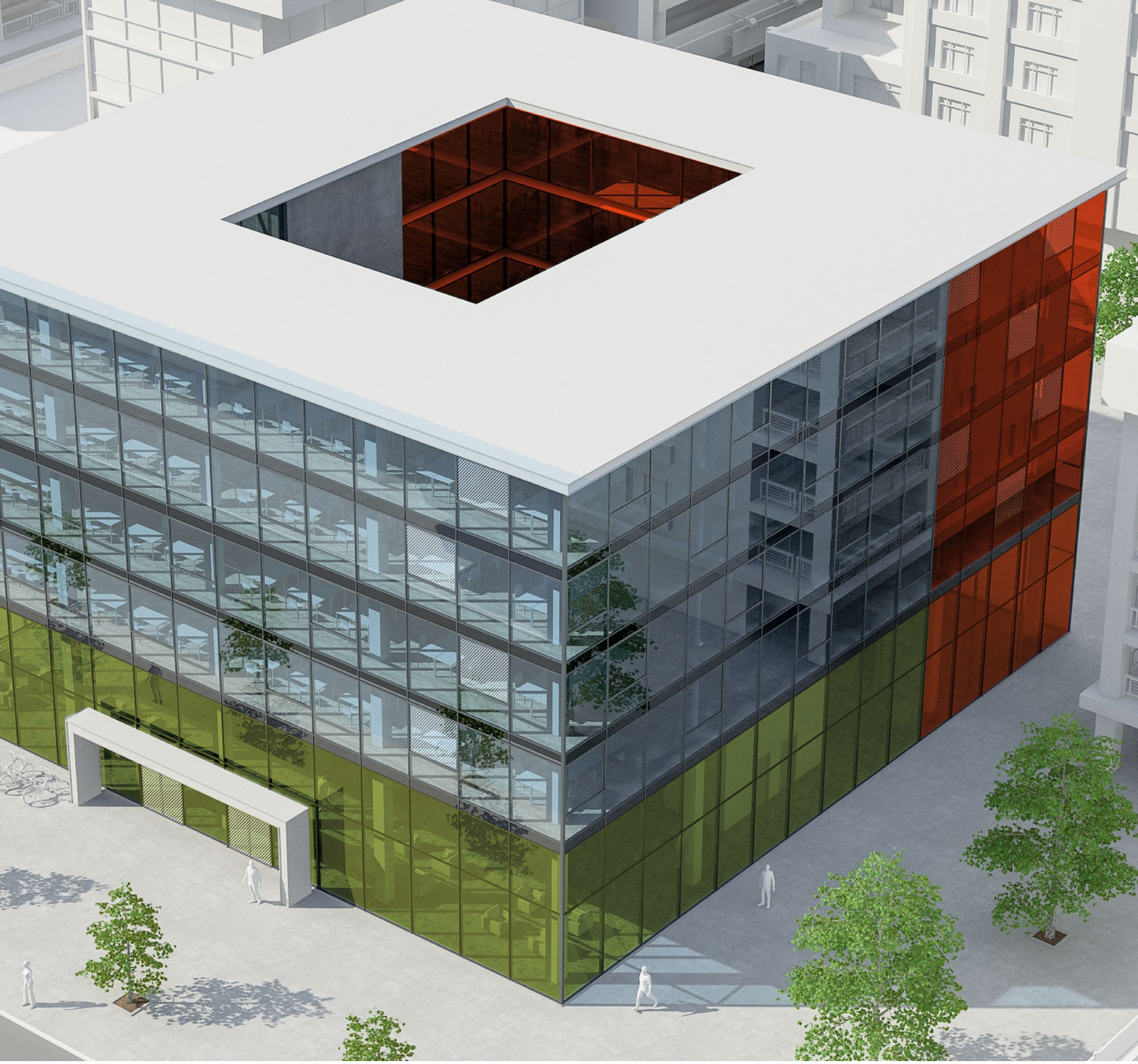


Technical specifications

Material variants	Substructure in steel, aluminium or wood Attachment profile in aluminium / steel Cover strips in aluminium and stainless steel
Dimensions	Vertical glazing (W×H): verified height 6030 mm, verified width 5812 mm Horizontal glazing (W×H): unlimited × 3980 mm, slope 0° - 15° Sloped glazing (W×H): unlimited × 4009 mm, slope 16° - 80°
Performance characteristics	Heat penetration: U_f > 1.0 W/(m²K) curtain wall
	Fire protection on sloped & horizontal glazing EI30 / EI60 / E30 / E60
	Resistance to wind loads: Vertical glazing: Resistance to wind loads according to EN 12179; 3 KN/m2, safety load 4.5 kN/m2 Sloped glazing: Resistance to wind loads following EN 13116: 2400 Pa / safety load 3600 Pa
	Watertightness: Vertical glazing: Watertightness in accordance with EN 12155: R7 (600 Pa) Sloped glazing: Watertightness following EN 12154: Class RE1200 Pa
	Air permeability: Vertical glazing: Air permeability in accordance with EN 12153: AE (>600) Sloped glazing: Air permeability following EN 12152: Class AE (1200 Pa)
	Impact resistance in accordance with EN 14019: I5/E5
System characteristics	CE marking according to EN 13830
	Design variants: curtain wall, sloped glazing
	Face widths: mullion/transom profile in 50 mm
	Max. filling weight: 450 kg
	Max. filling element thickness: 60 mm
	Glazing: dry glazing

Note country-specific approvals and requirements

Single-family house, CH-Balstahl
Thermally insulated mullion/transom facade, doors



forster thermfix vario Hi

- Curtain wall with high thermal insulation at Passiv House level phA

forster thermfix vario

- Burglary-resistance
- Bullet-resistance
- Thermal break

forster thermfix vario

- Fire protection
- Thermal break

forster thermfix vario

- Fire protection
- Burglary-resistance
- Bullet-resistance
- Thermal break

Windows forster unico XS

- Thermal break
- MINERGIE
- With ultra-slim appearance
- Burglary-resistance

Doors forster unico

- Thermal break
- Burglary-resistance
- Bullet-resistance

Windows forster unico

- Fire protection
- Thermal break

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forster

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