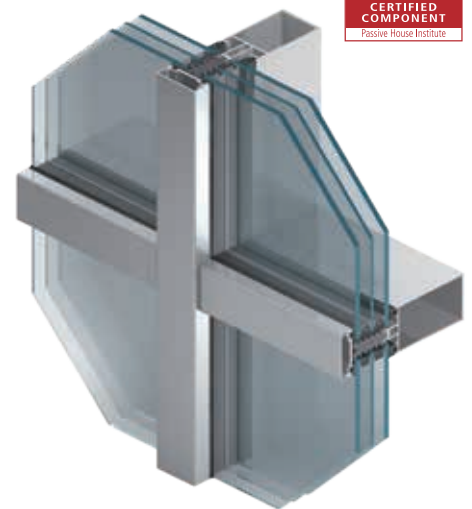




Façade systems **VFS50**

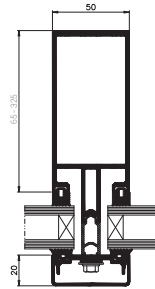
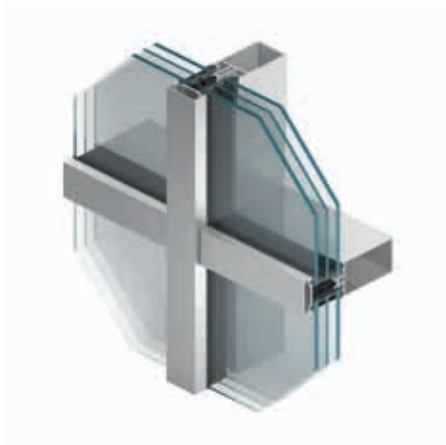
The VFS50 mullion-transom system has been designed to fabricate lightweight curtain walling, roofs, skylights and other spatial structures. On current trends in architecture, it allows aligning of mullion and transom profiles on the inner side of the façade, so obtaining variants of different appearance. This system forms the basis of a variant with enhanced thermal insulation: VFS50 HI+, and other fire protection solutions, and is also linked to the structures of different types of windows such as tilt-and-pull windows, roof windows and façade-integrated windows. When it comes to glass and aluminium structures, with this rich variety of solutions based on the VFS50 façade, architects and designers can now make their most audacious visions come true.



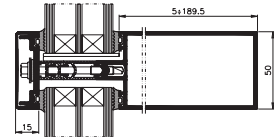
modern look

thermal insulation: U_f from 0.7 W/(m²K)

VFS50 / VFS50 HI



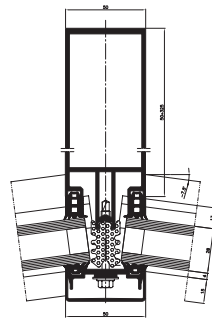
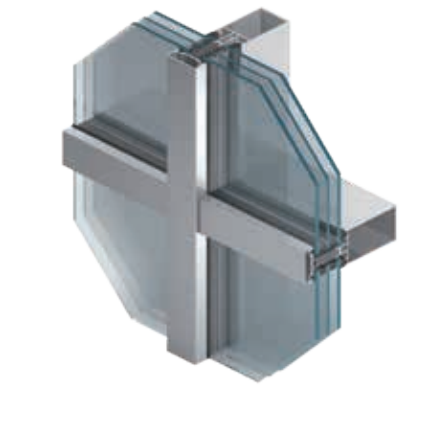
mullion – cross section VFS50



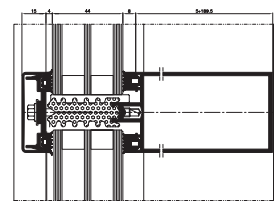
transom – cross section VFS50 HI

The VFS50 and the version with enhanced thermal insulation, the VFS50 HI, is intended for the design and construction of lightweight curtain and infill walls, roofs, skylights and other spatial structures. In line with current architectural trends, this means that the mullion and transom profiles can be flush on the inside of the façade and makes it possible to obtain a host of different looks for the exterior. The system also constitutes a basis for fire-resistant solutions.

VFS50 HI+



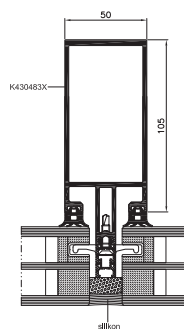
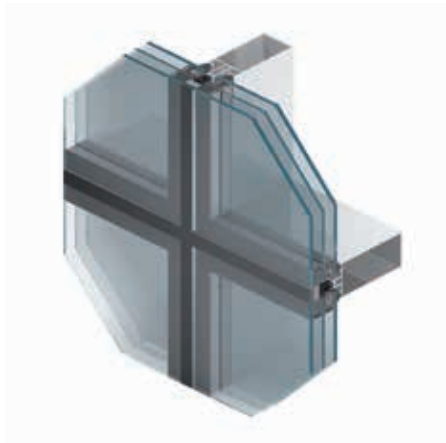
mullion – cross section – 7.5 %



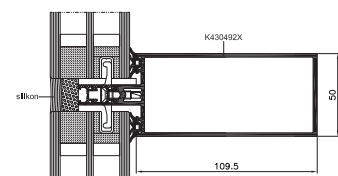
transom – cross section

This version, with the best thermal and acoustic insulation performance, uses a modified insulator made of PE material. The adequate shape of the insulator, in addition to high protection against heat transfer, ensures the proper conduct of screws that fix the clamping strips. This is important during the installation of the façade. For their part, new accessories give more freedom in selection of glazing.

VFS50 EFEKT

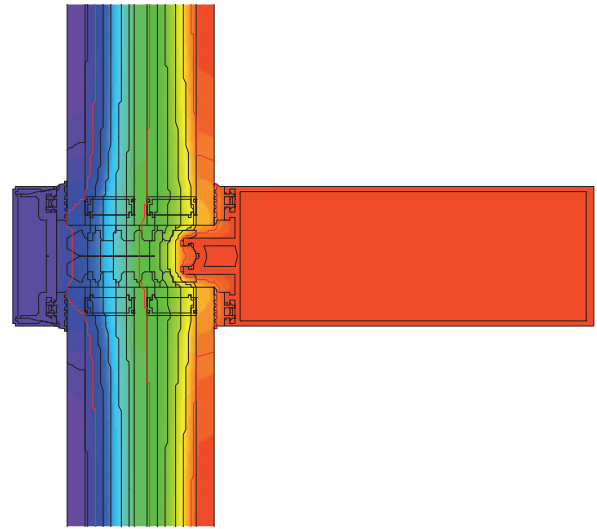
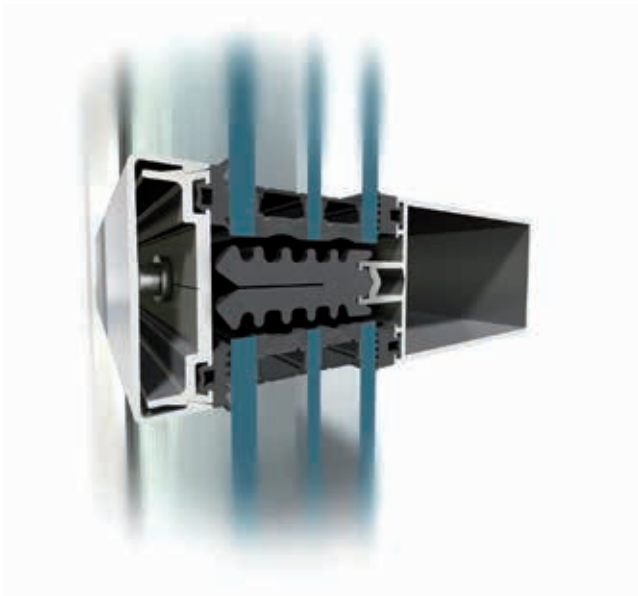


mullion – cross section



transom – cross section

A curtain wall which uses toggles and channels to fix the glazing to provide a uniform appearance of a smooth glass wall divided by a structure of vertical and horizontal lines of a width of 20 mm. It is possible to use within it large and heavy one- or two-chamber glass in-fills, including laminated pane sets and non-transparent panels based on insulated glass.



distribution of isotherms in VFS50 HI+ – façade

FUNCTIONALITY AND AESTHETICS

- angle joints enabling the free shaping of aluminium structures
- posts and beams with 'sharp' edges allowing construction of curtain wall supporting structures with the appearance of a uniform truss
- aesthetic curtain wall varieties and a number of lining profiles of various shapes providing multiple curtain wall appearances
- a large choice of curtain wall opening elements: windows and doors of various types, including skylight windows and windows integrated with the curtain wall, as well as tilt and parallel opening VFS50 OW windows
- a wide glazing range along with the availability of insulators and accessories allowing a high level of curtain wall thermal insulation
- the possibility of bending profiles and creating use curved structures

TECHNICAL SPECIFICATION	VFS50 VFS50 HI+	VFS50 HI	VFS50 EFEKT	VFS50 IW	VFS50 OW	VRW50
Mullions depth		50 – 325 mm		85 – 125 mm	—	—
Transom depth		5 – 209.5 mm		49.5 – 129.5 mm	—	—
Inertia mullions (range Ix)		26.04 – 4123.45 cm ⁴		70.43 – 245.70 cm ⁴	—	—
Inertia transoms (range Iz)		0.79 – 629.54 cm ⁴		23.76 – 205.98 cm ⁴	—	—
Glazing thickness	24 – 56 mm	24 – 52 mm	24 – 56 mm	24 – 56 mm	28 – 41 mm	32 – 51 mm

PERFORMANCE	VCW50 VFS50 HI+	VFS50 HI	VFS50 EFEKT	VFS50 IW	VFS50 OW	VRW50
Air Permeability	AE 1200, EN 12152			class 4, EN 12152		
Watertightness	RE 1200, EN 12154	RE 1500, EN 12154	RE 1200, EN 12154	E 1500, EN 12208	E 1650, EN 12208	E 1800, EN 12208
Windload resistance	2400 Pa, EN 13116			E 2400, EN 12210	class C5, EN 12210	2.4 kN/m ² , EN 12210
Thermal insulation	U _f from 0.7 W/(m ² K)	U _f from 1.0 W/(m ² K)	U _f from 1.1 W/(m ² K)	U _f from 1.6 W/(m ² K)	—	U _f from 1.8 W/(m ² K)
Impact resistance	I5/E5, EN 14019				—	class 4, EN 1873