

Façade systems

MB-SR50N MB-SR50N HI+

The **MB-SR50N** 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: **MB-SR50N 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 **MB-SR50N** façade, architects and designers can now make their most audacious visions come true.

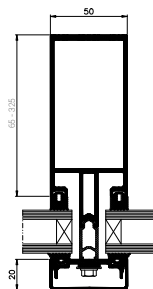
▪ *modern look*

▪ *thermal insulation: U_f from 0,7 W/(m²K)*

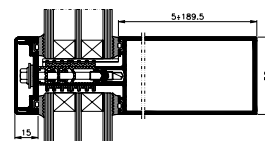
**RECOMMENDED
FOR ENERGY-EFFICIENT
CONSTRUCTIONS**



MB-SR50N / MB-SR50N HI



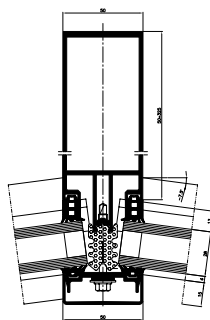
Mullion – cross-section
MB-SR50N



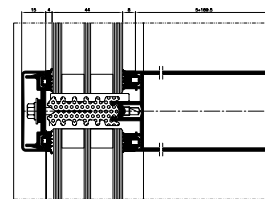
Transom – cross-section
MB-SR50N HI

The basic system version and its variant with enhanced insulating power allow constructing façades with visible narrow parting lines while ensuring durability and strength of the structure. The wide offer of profiles enables the architects and designers to realise even the most enterprising ideas for aluminium and glass structures.

MB-SR50N HI+



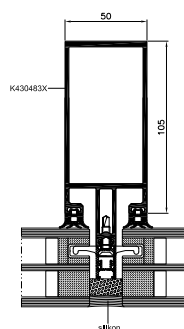
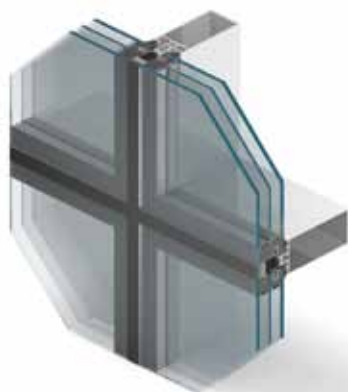
Mullion – cross-section – 7,5 %



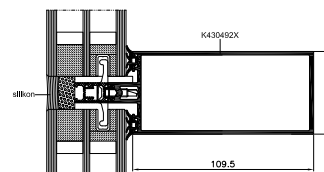
Transom – cross-section

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.

MB-SR50N EFEKT



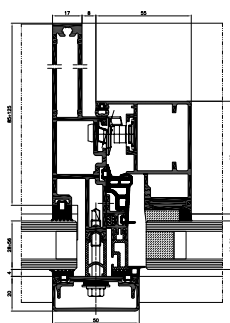
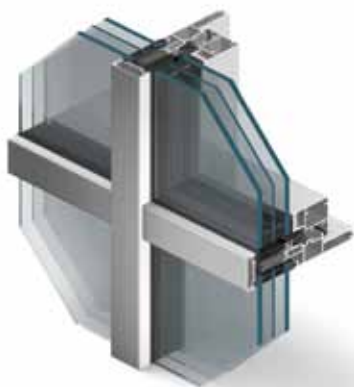
Mullion – cross-section



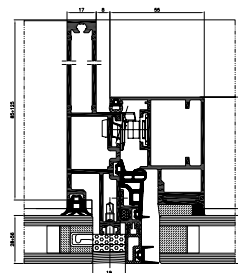
Transom – cross-section

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 2 cm. 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.

MB-SR50N IW



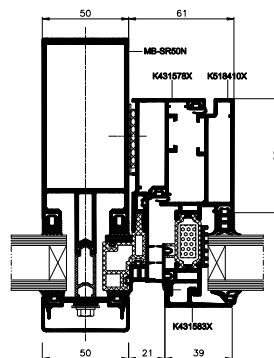
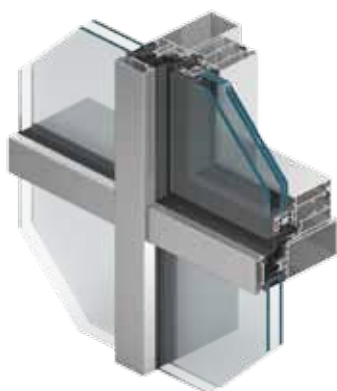
mullion with window, section view
MB-SR50N IW – standard variant



mullion with window, section view
MB-SR50N IW – EFEKT variant

The Concealed Vent top hung open in gives the seamless appearance to the curtain wall. There are three varieties available using standard slats and flat slats and EFEKT like construction.

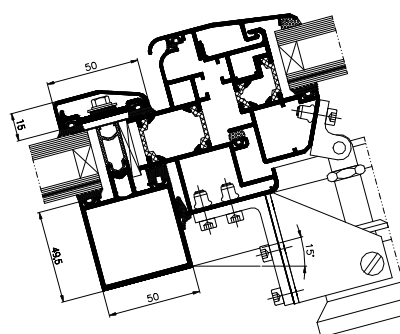
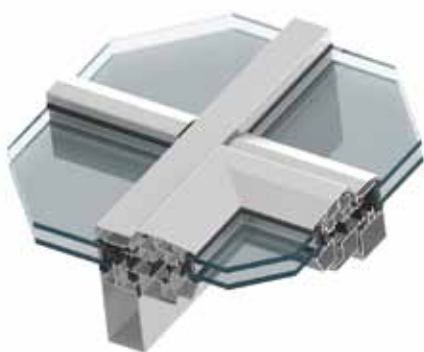
MB-SR50N OW



façade with window MB-SR50N OW – variant with strips

One of the most important advantages of this solution are the unusually economical shapes, which add lightness to the entire structure. Thanks to application of the most modern technology of structural gluing, based on gluing the outer glass panel to the aluminium frame with structural silicon, we have avoided the necessity to use any aluminium elements from the outside or any mechanical joints for fitting the glass panel.

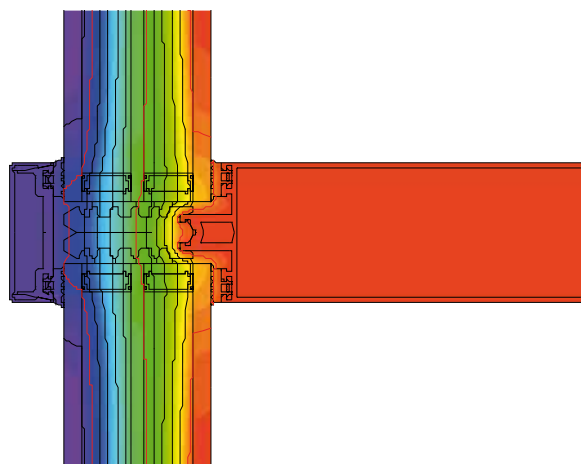
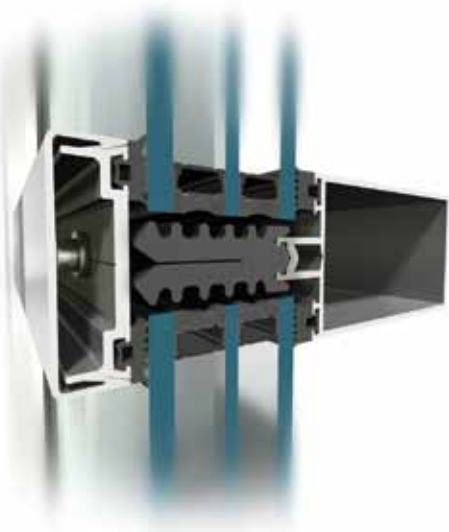
MB-SR50N RW



MB-SR50N RW roof slope window, view

A skylight window is a part of the MB-SR50N system, and is intended for roof mounting at the inclination angle from 5° to 75° in relation to the horizon, and may be used for making the ventilation hatches.

MB-SR50N / MB-SR50N HI+



distribution of isotherms in MB-SR50N HI+ – façade

FEATURES AND BENEFITS

- 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 MB-SR50N 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	MB-SR50N MB-SR50N HI+	MB-SR50N HI	MB-SR50N EFEKT	MB-SR50N IW	MB-SR50N OW	MB-SR50N RW
Mullions depth	50 – 325 mm			85 – 125 mm	–	–
Transom depth	5 – 189,5 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 rang	24 – 56 mm	24 – 52 mm	24 – 56 mm	24 – 56 mm	28 – 41 mm	24 – 32 mm

PERFORMANCE	MB-SR50N MB-SR50N HI+	MB-SR50N HI	MB-SR50N EFEKT	MB-SR50N IW	MB-SR50N OW	MB-SR50N RW
Air Permeability	AE 1050, EN 12152	AE 1200, EN 12152		class 4, EN 12207		
Watertightness	RE 1200, EN 12154	RE 1500, EN 12154	RE 1200, EN 12154	E 1500, EN 12208	E 1650, EN 12208	E 1200, EN 12208
Windload resistance	2,4 kN/m ² , EN 13116			E 2400, EN 12210	class C5, EN 12210	
Impact resistance	I5/E5, EN 14019				–	class 5, EN 13049
Thermal insulation (U _f)	from 0,7 W/(m ² K)	from 1,0 W/(m ² K)	from 1,1 W/(m ² K)	from 1,6 W/(m ² K)	–	–