MB-86N

WINDOW AND DOOR SYSTEMS

TECHNICAL DATA	MB-86 WINDOWS	MB-86 DOORS	MB-86 US
Frame depth	77 mm	77 mm	77 mm
Sash depth	86 mm	77 mm	86 mm
Glazing thickness	frame: 13,5 – 58,5 mm sash: 21 – 67,5 mm	13,5 – 58,5 mm	frame: 7 – 52 mm sash: 15 – 60 mm
MAX. DIMENSIONS AND WEIGHTS OF STRUCTURES			
Max sash dimensions (H×L)	H to 2800 mm L to 1700 mm	H to 3000 mm L to 1400 mm	H to 2500 mm L to 1600 mm
Max sash weight	150 kg	200 kg	150 kg

MB-86 / 86 SI / AERO

The MB-86N aluminium system is a successor to the popular MB-86, a window and door solution widely used in the construction industry. Modernisation involves the introduction of innovative gaskets and thermal breaks of the latest generation. All this is to achieve even better thermal and airtightness parameters. Consequently, it is an energy-efficient product that will ensure comfort and reduce heating costs.

The system also includes the MB 86N SI variant with additional insulating inserts inside the profiles improving its thermal parameters.

The technology ensures product durability by employing specially designed aluminium sections whose rigidness makes expansive yet stable constructions with extensive glazing possible. Outstanding kinematics -is a characteristic feature of the system. It allows the creation of slender doors and openable windows.

An MB-86US version with a concealed sash and a modern MB-86US AERO option with an aerogel insulation insert is also available. In the standard option, the windows come with a triple-pane glazing unit and a low window threshold with nosing. The MB-86N system means freedom in shaping the space and the possibility of making windows to size with different shapes. It is highly resistant to corrosion and various atmospheric factors.

MB-86 profile alternatives:

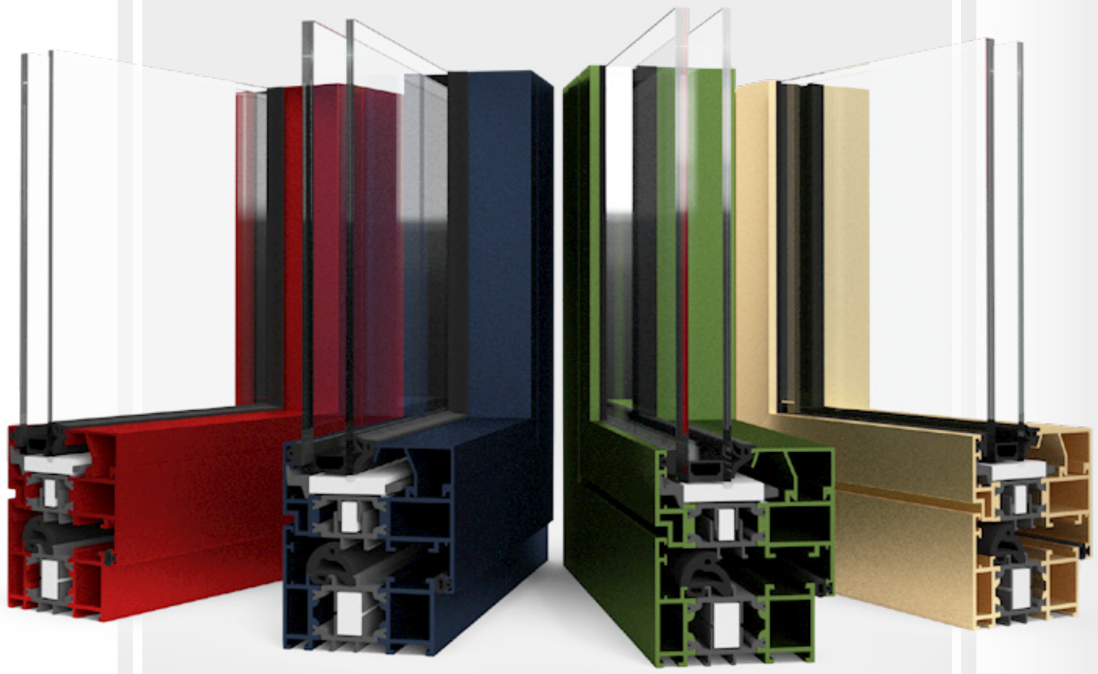
MB-86N SI

MB-86 AERO

MB-86 US AERO

COLOURS

Aluminium profiles create unlimited possibilities. To achieve the desired colour effect, the windows can be varnished using RAL K7 palette colours or wood-like coatings.



ALUPROF
ALUMINIUM SYSTEMS

Window & door system
MB-86N

The highly efficient MB-86N window and door system makes it possible to satisfy the diverse needs of users. There are two versions of the profiles, the ST and the SI, which are designed to meet different thermal energy efficiency requirements. The system provides superb performance parameters.

Another advantage of the MB-86N is the high durability of the profiles, which make it possible to produce large-scale and heavy structures. Several versions are available. The MB-86US is a window with a concealed vent. The MB-86 Casement provides an outward-opening window with a thermal break. The MB-86B has been developed to meet the requirements of the Belgian market.

U_f from 0.62 W/(m²K)

WINDOWS MB-86N

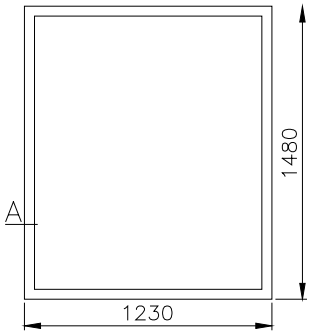
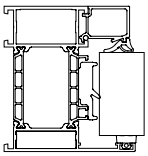
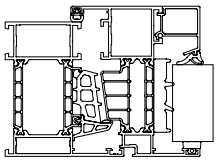
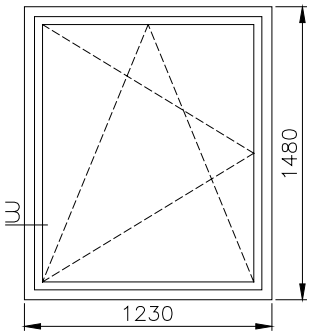
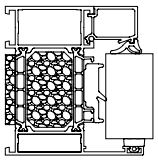
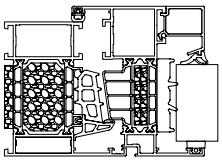
MB-86N ST

MB-86N SI

MB-86US

MB-86 Casement

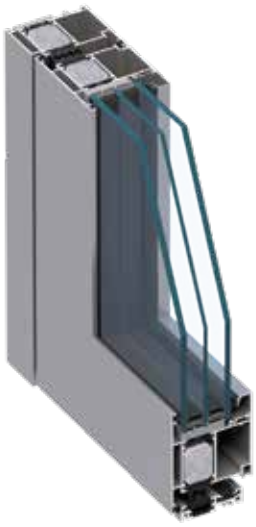
Examples of heat transfer coefficients U_w

WINDOWS SCHEMES	SECTION A OR B		Value Uw W/(m²K) for construction with double chamber glass and warm spacer	
			U_g=0.5	U_g=0.7
	MB-86N ST	 K528612X	0.79	0.96
		 K528612X + K528702X	0.89	1.02
	MB-86N SI	 K528612X	0.67	0.83
		 K528612X + K528702X	0.76	0.89

DOORS MB-86N

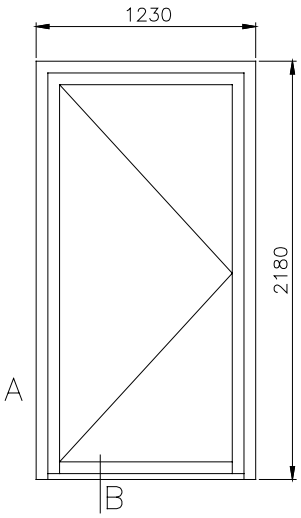
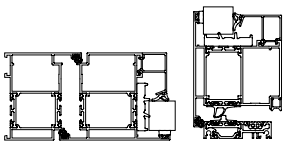
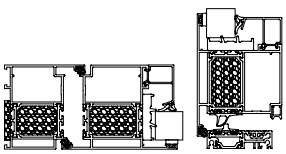
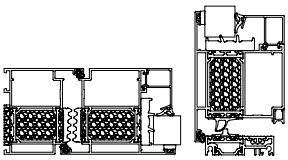
MB-86N ST

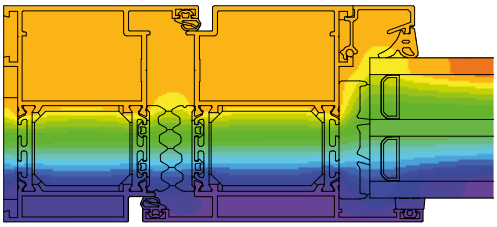
MB-86N SI



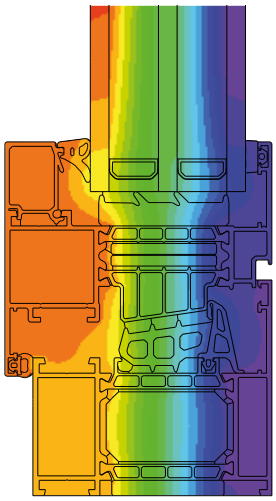
MB-86N SI+

Examples of heat transfer coefficients U_D

DOORS SCHEMES	SECTION A OR B		Value UD W/(m²K) for construction with double chamber glass and warm spacer	
			U_g=0.5	U_g=0.7
	MB-86N ST	 K528731X+K528746X+K528770X	1.10	1.23
	MB-86N SI	 K528731X+K528746X+K528770X	0.97	1.10
	MB-86N SI+	 K528731X+K528746X+K528770X	0.88	1.01



Distribution of isotherms in **MB-86N SI+** door



Distribution of isotherms in **MB-86N SI** window

FEATURES AND AESTHETICS

- wide range of profiles guarantees the desired aesthetics and resistance
- with its new shape, wide thermal breaks allow the use of an additional barrier in the profiles' insulation zone
- two-component, central gasket seals perfectly and thermally insulates the space between the casement and the frame
- glazing strips with additional sealing, comes in three versions: Standard, Prestige and Style
- profiles' shapes are well adapted to numerous multi-point locking systems, including concealed hinges
- a wide range of glazing allows the use of all common types of windows triple glazing units, acoustic or security panes
- profiles' drainage functionality is available in two versions: traditional and concealed
- anti-burglary windows and doors up to RC4 class

TECHNICAL SPECIFICATION	MB-86N	MB-86B	MB-86US	MB-86 Casement
Depth of frame (window / door)	77 mm / 77 mm	77 mm / 77 mm	77 mm	77 mm
Depth of leaf (window / door)	86 mm / 77 mm	86 mm / 77 mm	80.8 mm	77 mm
Glazing range (window / door)	frame: 8.5 to 61 mm leaf: 17.5 to 70 mm / frame: 8.5 to 61 mm	frame: 13 to 61 mm leaf: 21 to 70.5 mm / frame: 13 to 61 mm	frame: from 7 to 52 mm leaf: from 15 to 60 mm	frame: from 13 to 61 mm leaf: from 22 to 70 mm
PROFILES DIMENSIONS				
Max. size (H×W) (window / door)	H to 3000 mm L to 1700 mm / H to 3000 mm L to 1400 mm	H to 2500 mm L to 1500 mm / H to 2600 mm L to 1400 mm	H to 2500 mm L to 1600 mm	H to 2500 mm L to 2400 mm / H to 2800 mm L to 1400 mm
SIZE LIMITATIONS				
Solutions (window / door)	fixed window, side-hung window, hopper window, tilt-and-turn window, single & double outward and inward openable door		fixed window, side-hung window, hopper window, tilt-and-turn window	fixed, side-hung, awning and bottom-hung

PERFORMANCE	MB-86N	MB-86B	MB-86US	MB-86 Casement
Air permeability (window / door)	class 4, EN 12207	class 4, EN 12207	class 4, EN 12207	class 4, EN 12207
Water tightness (window / door)	class E 4800*, EN 12208, klasa E1500, EN 12208 / class E1350 Pa	class 9A, EN 12208 / class 6A, EN 12208	class E 1350, EN 12208	E1950 Pa, EN 12208
Thermal insulation (window / door)	U_w from 0,62 W/(m²K)* U_w from 0,68 W/(m²K)** U_D from 0,80 W/(m²K)***	—	—	—
Windload resistance (window / door)	class CE3330 (3330Pa) EN 12210 / class C5 (2000Pa), class B5 (2000Pa) EN 12210	class C4, EN 12210 / class C5, EN 12210	class C5, EN 12210	class C5, EN 12210
Impact resistance (window / door)	—	class 3 / class 3	—	class 3 / klasa 3

* - U_w for MB-86N SI-based fixed window casement size 1700×2800 mm, with glazing U_g=0,5 W/(m²K)
** - U_w for MB-86N SI-based openable window casement size 1700×2150 mm, with glazing U_g=0,5 W/(m²K)
*** - U_D for MB-86N SI+ door size 1400×3000 mm, with glazing U_g=0,5 W/(m²K)

ALUPROF ALUMINIUM SYSTEMS

ALUPROF SA
ul. Warszawska 153, 43-300 Bielsko-Biała, Poland
tel. +48 33 81 95 300, fax +48 33 82 20 512
e-mail: aluprof@aluprof.eu
www.aluprof.com

EN-06.2022