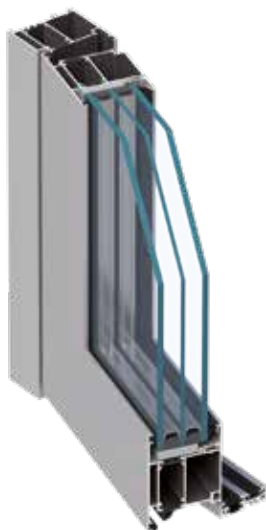
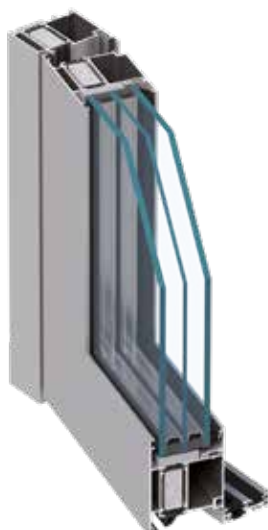


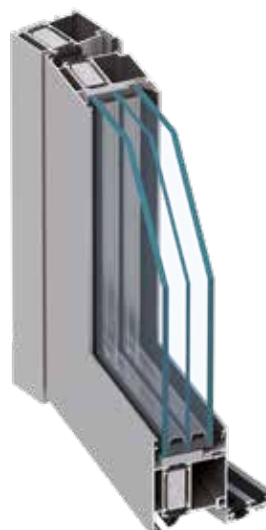
DOORS



MB-79N ST



MB-79N SI



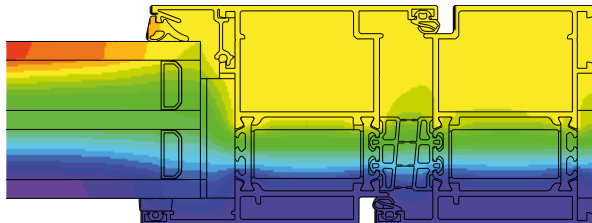
MB-79N SI+



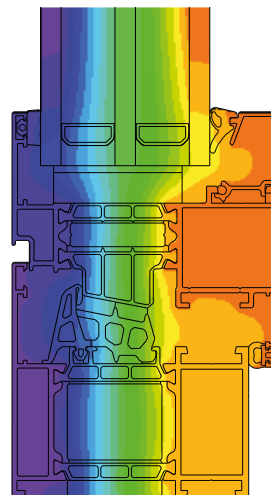
MB-79N SI, SI+

Examples of heat transfer coefficients U_D

DOORS SCHEMES	SECTION A OR B	Value U_D [W/m ² K]		
		Glass with Multitech frame		
		Double chamber		Single chamber
		$U_g=0.5$	$U_g=0.7$	$U_g=1.0$
	MB-79N E (ST) K520131X+K520146X+8G00031X	1.16	1.29	1.51
	MB-79N SI K520131X+K520146X+8G00031X	1.06	1.20	1.44
	MB-79N SI+ K520131X+K520146X+8G00031X	1.01	1.14	1.35



Distribution of isotherms in **MB-79N SI+** door



Distribution of isotherms in **MB-79N SI** window

FEATURES AND AESTHETICS

- profile depth: 79 mm for the vent and 70 mm for the window frame and door leaf
- the windows and doors feature thermal breaks made of an innovative material with a brand-new shape, allowing the use of a seal in the profile insulation
- three thermal variants for the window structures, the MB-79N E, MB-79N ST and MB-79N SI. Three variants for the door structures, the MB-79N ST, MB-79N SI and MB-79N SI+
- the structure meets the Technical Requirements which came into force in 2021, at 0.9 W/(m²K) for the windows and 1.3 W/(m²K) for the doors
- thermal insulation: U_w from 0.64 W/(m²K)
- excellent kinematics, making it possible to build narrow, operable windows
- door leaf profiles have an isolation joint, which eliminates thermal stresses during operation
- invisible hinges and the most popular multi-point hardware can be used, including concealed fittings, together with state-of-the-art AluPilot fittings. For doors, hardware with automation and access control functions is also available
- suitable for a wide range of double or triple glazing of up to 63 mm for windows and 54 mm for doors, making it possible to use every commonly available type of glass, including acoustic and burglary-resistant glass
- class RC1 to RC3 burglary-resistant doors can be produced using the system, as can panelled front doors, providing a wealth of aesthetic potential
- a large selection of handles in a range of styles is available, including a minimalist look, with a rosette or without
- the MB-79N Casement variant, with outward-opening windows and a thermal break, is also available

TECHNICAL SPECIFICATION	MB-79N WINDOWS	MB-79N DOORS	MB-79N CASEMENT
Frame depth	70 mm	70 mm	70 mm
Casement depth	79 mm	70 mm	79 mm
Glazing thickness	frame: 1.5 – 54 mm, vent: 10.5 – 63 mm	vent: 1.5 – 54 mm	frame: 1.5 – 54 mm, vent: 10.5 – 63 mm
Max. casement size (H×L)	H to 2700 mm, L to 1350 mm / H to 2150 mm, L to 1700 mm	H to 2800 mm, L to 1400 mm	H to 2700 mm, L to 1400 mm / H to 2500 mm, L to 2400 mm

PERFORMANCE	MB-79N WINDOWS	MB-79N DOORS	MB-79N CASEMENT
Air permeability	class 4, EN 12207	class 4, EN 12207	class 4, EN 12207
Water tightness	class E 1950, EN 12208	class E 900, EN 12208	class E 1800, EN 12208
Thermal insulation	U_w from 0.64 W/(m ² K)* U_w from 0.72 W/(m ² K)**	U_D from 0.90 W/(m ² K)***	U_w from 0.74 W/(m ² K)****
Windload resistance	class C5, EN 12210	class C5/B5, EN 12210	class C5/B5, EN 12210

* - U_w for MB-79N SI-based fixed window casement size 1700×2700 mm, with glazing $U_g=0.5$ W/(m²K)

** - U_w for MB-79N SI-based openable window casement size 1700×2150 mm, with glazing $U_g=0.5$ W/(m²K)

*** - U_D for MB-79N SI+ door size 1400×2800 mm, with glazing $U_g=0.5$ W/(m²K)

**** - U_w for MB-79N Casement SI-based openable window casement size 1900×2500 mm, with glazing $U_g=0.5$ W/(m²K)

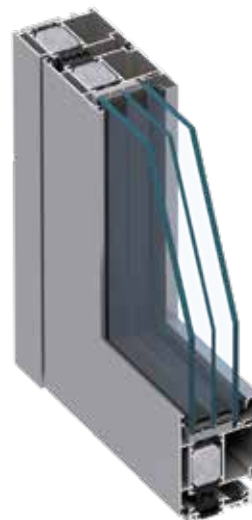
DOORS MB-86N



MB-86N ST



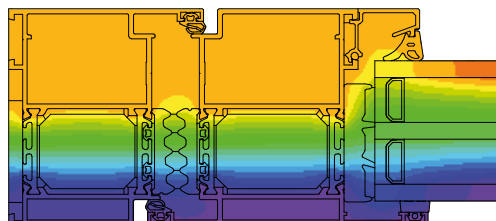
MB-86N SI



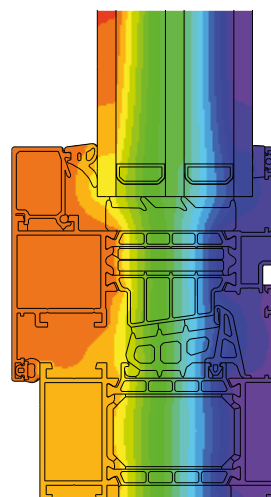
MB-86N SI+

Examples of heat transfer coefficients U_D

DOORS SCHEMES	SECTION A OR B	Value U_D W/(m ² K) 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/(m ² K)* U_w from 0,68 W/(m ² K)** U_D from 0,80 W/(m ² K)***	—	—	—
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)