



WINDOW AND DOOR SYSTEMS

MB-86 MB-86B MB-86US

This highly efficient window and door system meets the diverse needs of users. The system's profiles have been designed in 3 versions depending on the requirements of thermal energy savings: ST, SI and AERO. **MB-86** is the world's first aluminium window and door system to use aerogel – a highly thermally-insulated material.

Highly resistant profiles are yet another advantage of **MB-86** system – they allow for producing large-size and heavy structures. Also, Aluprof offers a version for windows with concealed sash **MB-86US** as well as a thermally broken, outward opening window system – the **MB-86 Casement**. **MB-86B** has been developed to meet the requirements/needs of the Belgian market.

U_w for openable window from $0.72W/(m^2K)$



Stay warm for years to come



MB-86 AERO



MB-86B



MB-86US



MB-86 CASEMENT

FEATURES AND BENEFITS

- 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
- MB-86 Casement outward-opening window
- MB-86US window, featuring invisible casement when looking from outside
- MB-86B has been awarded with certification ATG by the Belgian Research Institute UBAtc.



TECHNICAL SPECIFICATION	MB-86	MB-86B	MB-86US	MB-86 Casement
PROFILES DIMENSIONS				
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: 13.5 to 61.5 mm leaf: 21 to 70.5 mm / frame: 13.5 to 61.5 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
SIZE LIMITATIONS				
Max. size (H×W) (window / door)	H to 2800 mm, W to 1700 mm / H to 3000 mm, W to 1400 mm	H to 2500 mm W to 1500 mm / H to 2600 mm W to 1400 mm	H to 2500 mm, W to 1600 mm	H to 2500 mm W to 2400 mm / H to 2800 mm W to 1400 mm
Solutions	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-86	MB-86B	MB-86US	MB-86 Casement
Air Permeability	class 4, EN 12207 / class 4, EN 12207	class 4, EN 12207	class 4, EN 12207	class 4, EN 12207
Watertightness	class E 4350**, EN 12208, class 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	MB-86 ST U_f from 1.39 W/(m ² K) MB-86 SI U_f from 0.92 W/(m ² K) MB-86 AERO U_f from 0.57 W/(m ² K) MB-86 AERO U_w from 0.72 W/(m ² K)* / MB-86 ST U_f from 2.16 W/(m ² K) MB-86 SI U_f from 1.76 W/(m ² K) MB-86 SI+ U_f from 1.49 W/(m ² K) MB-86 AERO U_f from 1.22 W/(m ² K)	U_f from 1.3 W/(m ² K) / U_f from 2.0 W/(m ² K)	MB-86 ST U_f from 1.03 W/(m ² K) MB-86 SI U_f from 1.01 W/(m ² K) MB-86 AERO U_f from 0.86 W/(m ² K)	—
Windload resistance	class C5, EN 12210 / class C1/B2, EN 12210	class C4, EN 12210 / class C5, EN 12210	class C5, EN 12210	C5, EN 12210
Impact resistance	—	class 3 / class 3	—	class 3 / class 3

* - U_w for openable window MB-86 Aero 1.70×2.10 m, glazing $U_g=0.5$ W/(m²K) with spacer Chromatech Ultra

** - for the reference window with additional striker plates