

**NEW
&
INNOVATIVE**

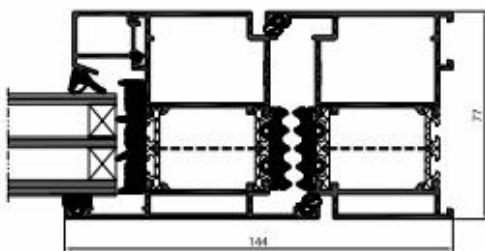
• U_f from 0,57 W/m²K

• Innovative Nanotechnology

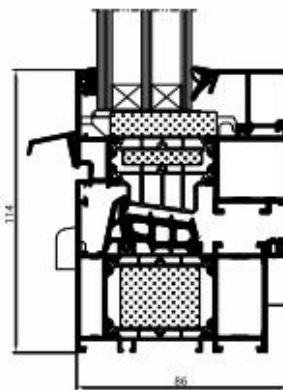
• Large unit sizes

Window and door system

MB-86



Door MB-86SI+



Opening window MB-86 Aero

The new MB-86 window and door series have been designed to offer outstanding insulation properties. It meets the increasing requirements from the legislative and general market demands for the enhanced energy saving construction of new windows and doors. Offered in three varieties ST, SI and AERO it is the first aluminum system to employ silica aerogel. The nanoporous material that has a very high proportion of free void volume compared to conventional solid materials. Its high pore volume, low solid content, and torturous path amorphous structure give rise to low values of thermal conductivity. Therefore the system features the industry leading thermal performance. In addition it also features exceptional rate of profiles inertia that allows for greater construction in size and weight.

Da Fas
SOLUTION FOR EVERYONE

 **ALUPROF**

MB-86 WINDOWS



window MB-86 ST



window MB-86 SI



window MB-86 Aero

Examples of heat transfer coefficients U_w

| WINDOWS SCHEMES | SECTION A OR B | Value U_w [W/m ² K] | | |
|-----------------|-------------------------|----------------------------------|-----------|----------------|
| | | Glass with Thermfix frame | | |
| | | Double chamber | | Single chamber |
| | | $U_g=0,5$ | $U_g=0,7$ | $U_g=1,1$ |
| | K518612X | 0,77 | 0,94 | 1,29 |
| | K518612X + K518702X | 0,90 | 1,04 | 1,33 |
| | K718612X | 0,74 | 0,91 | 1,26 |
| | K718612X + K718702X | 0,85 | 0,99 | 1,28 |
| | K818612X | 0,72 | 0,88 | 1,23 |
| | K818612X + K818702X | 0,80 | 0,93 | 1,20 |

MB-86 DOORS



door MB-86 ST



door MB-86 SI

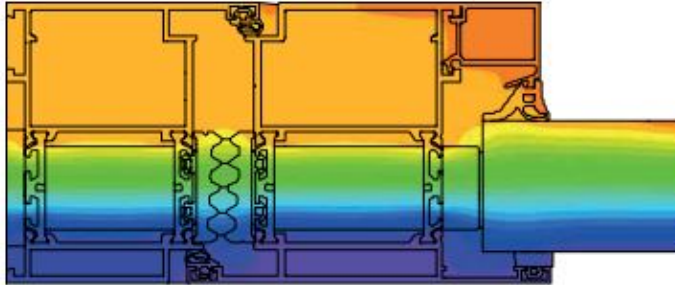


door MB-86 Aero

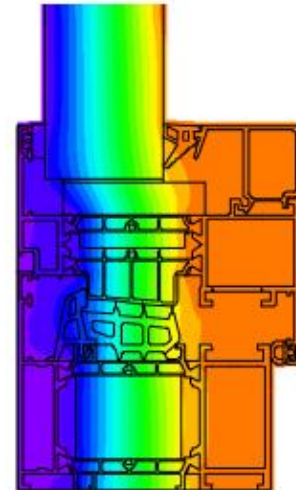
Examples of heat transfer coefficients U_D

| DOOR SCHEME | SECTION A OR B | Value U_D [W/m ² K] | | |
|-------------|--|----------------------------------|-----------|----------------|
| | | Glass with Thermfix frame | | |
| | | Double chamber | | Single chamber |
| | | $U_g=0,5$ | $U_g=0,7$ | $U_g=1,1$ |
| | MB-86 ST K51B731X+K51B746X+K51B770X | 1,19 | 1,32 | 1,60 |
| | MB-86 SI K71B731X+K71B746X+K71B770X | 1,07 | 1,20 | 1,48 |
| | MB-86 SI+ K71B731X+K71B746X+K71B770X | 0,98 | 1,11 | 1,40 |
| | MB-86 AERO KB1B731X+KB1B746X+KB1B770X | 0,88 | 1,02 | 1,33 |

MB-86



Distribution of isotherms in MB-86 AERO door



Distribution of isotherms in MB-86 AERO window

FEATURES AND BENEFITS

- large selection of profiles
- newly shaped, extra thick thermal breaks
- multi component central gasket
- glazing strips with additional sealing option
- glazing up to 67,5 mm enabling all types of three chamber glazing, acoustic and security, anti burglary glazing
- large, wire-free glass areas
- appropriate for variety of hardware including concealed hinges
- water draining available in both traditional and concealed options
- highly energy efficient from 0,5 W/m²K
- clean, sharp lines of narrow extruded aluminum framing
- multitude of finish options

| TECHNICAL SPECIFICATION | WINDOWS | DOORS |
|------------------------------------|---|----------------------|
| Depth of frame | 77 mm | 77 mm |
| Depth of leaf | 86 mm | 77 mm |
| Glazing range (frame / leaf) | frame: 13,5 - 58,5 mm leaf: 21 - 67,5 mm | 13,5 - 58,5 mm |
| Size and weight limitations | | |
| Maximum size (HxW) | H 2800 mm, W 1700 mm | H 3000 mm, L 1400 mm |
| Max weight | 150 kg | 200 kg |

| PERFORMANCE | WINDOWS | DOORS |
|--|---|---|
| Air Permeability | Class 4, EN 12207:2001 | Class 3, PN-EN 12207:2001 |
| Watertightness | Class E 1500, EN 12208:2001 | Class 5A (200 Pa), PN-EN 12208:2001 |
| Thermal insulation window U _f | MB-86 ST from 1,39 W/(m ² K) MB-86 SI from 0,92 W/(m ² K) MB-86 AERO from 0,57 W/(m ² K) | MB-86 ST from 2,16 W/(m ² K) MB-86 SI from 1,76 W/(m ² K) MB-86 SI+ from 1,49 W/(m ² K) MB-86 AERO from 1,22 W/(m ² K) |
| Resistance to windload | Class C5 (2000Pa) EN 12211:2001; EN 12210:2001 | Class C1/B2, PN-EN 12210:2001 |