



Hansen



## Door system with a thermal break Aluprof MB-86

The **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 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.

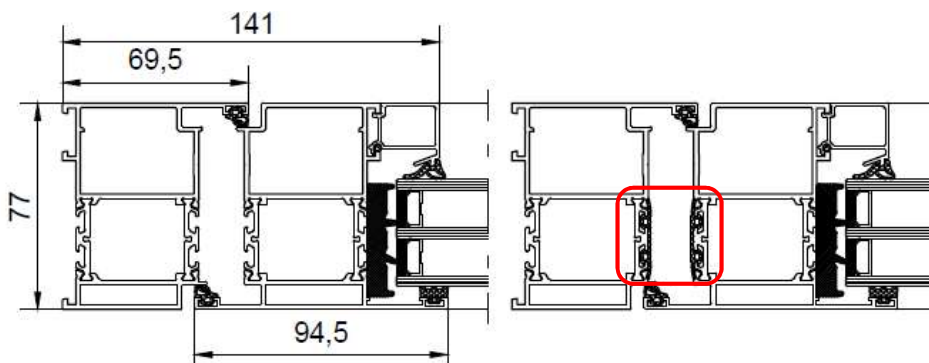
<b>Depth of frame:</b>	77 mm
<b>Depth of leaf:</b>	77 mm
<b>Glazing range:</b>	13-61 mm
<b>Maximum size:</b>	L to 1400 mm, H to 3000mm
<b>Maximum weight of leaf:</b>	200 kg
<b>Variants:</b>	MB-86 ST MB-86 SI, SI+ MB-86 AERO
<b>Thermal insulation:</b>	MB-86 ST Uf from 2.16 W/(m <sup>2</sup> K) MB-86 SI Uf from 1.76 W/(m <sup>2</sup> K) MB-86 SI+ Uf from 1.49 W/(m <sup>2</sup> K) MB-86 AERO Uf from 1.22 W/(m <sup>2</sup> K)
<b>Air permeability:</b>	Class 4
<b>Water tightness:</b>	Class E 1350
<b>Resistance to wind load:</b>	Class C5/B5
<b>Burglar resistance:</b>	RC1-RC3

Examples of heat transfer coefficients  $U_w$ 

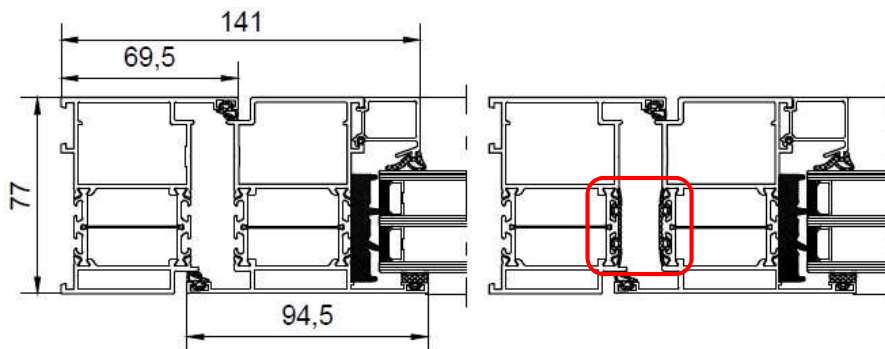
System	$U_w$ factor for glass $U_g=0,5$	$U_w$ factor for glass $U_g=0,7$
MB-86 ST	1,19 W/m <sup>2</sup> K	1,32 W/m <sup>2</sup> K
MB-86 SI	1,07 W/m <sup>2</sup> K	1,20 W/m <sup>2</sup> K
MB-86 SI+	0,98 W/m <sup>2</sup> K	1,11 W/m <sup>2</sup> K
MB-86 AERO	0,88 W/m <sup>2</sup> K	1,02 W/m <sup>2</sup> K

$U$ -value calculated on the basis of a door measuring 1230 x 2180 mm (WxH)

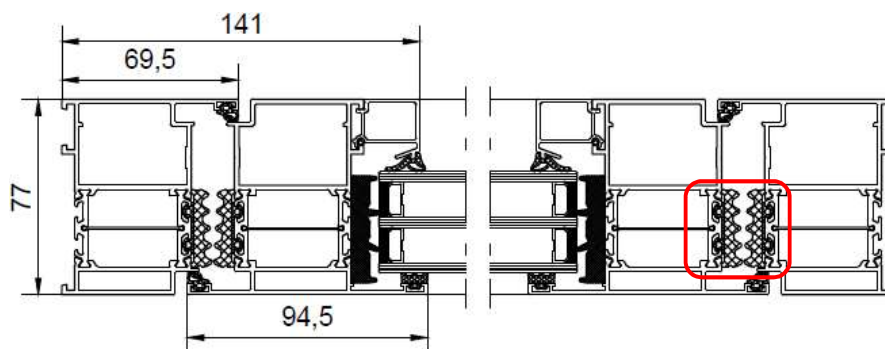
## MB-86 ST



## MB-86 SI



## MB-86 SI+



MB-86 AERO

