

Certificate

Passive House suitable component

for cool, temperate climate, valid until 31.12.2016

Passive House Institute
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Category: **Sliding Door**
 Manufacturer: **Slavona, s.r.o.**
37881 Slavonice, Czech Republic
 Product name: **HS Progression Plus**

The following comfort criteria were used in awarding this certificate:

Given a U_g value of $0.70 \text{ W}/(\text{m}^2\text{K})$ and a window size of 2.40 m by 2.50 m

$$U_w = 0.78 \text{ W}/(\text{m}^2\text{K}) \leq 0.80 \text{ W}/(\text{m}^2\text{K})$$

provided that the installation is, with regard to the thermal bridges, equal or better than shown in the data sheet, the sliding door meets the following criterion.

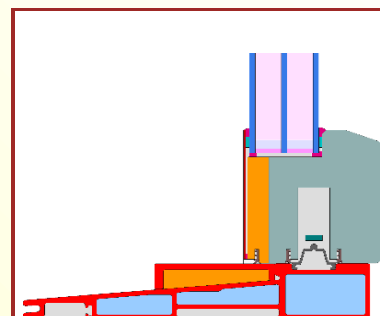
$$U_{w, \text{ installed}} \leq 0.85 \text{ W}/(\text{m}^2\text{K})$$

Thermal data

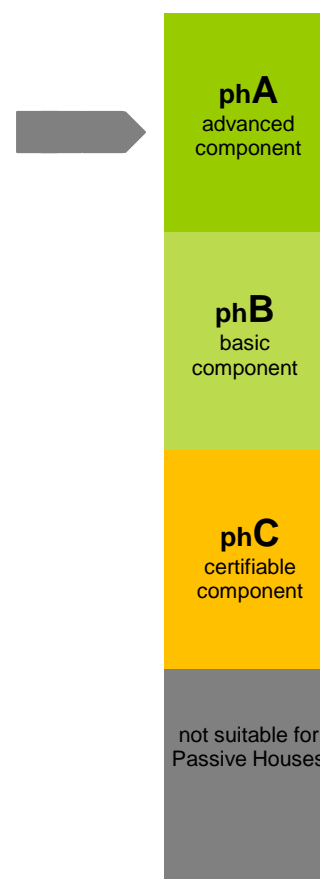
	U_f -value [W/(m ² K)]	Width [mm]	Ψ_g [W/(mK)]	$f_{Rsi=0.25}$ [-]
Spacer	ULTIMATE Swisspacer *			0.70
Bottom Fix	1.04	42	0.023	
Bottom S	0.95	142	0.023	
Top Fix	0.63	124	0.027	
Top S	0.78	124	0.029	
Side Fix	0.74	40	0.029	
Side S	0.61	117	0.024	
Mullion	1.30	72	0.029	

*Spacers of lower thermal quality, especially those made of aluminium, lead to significantly higher thermal losses and lower temperature factors.

Further information see data sheet

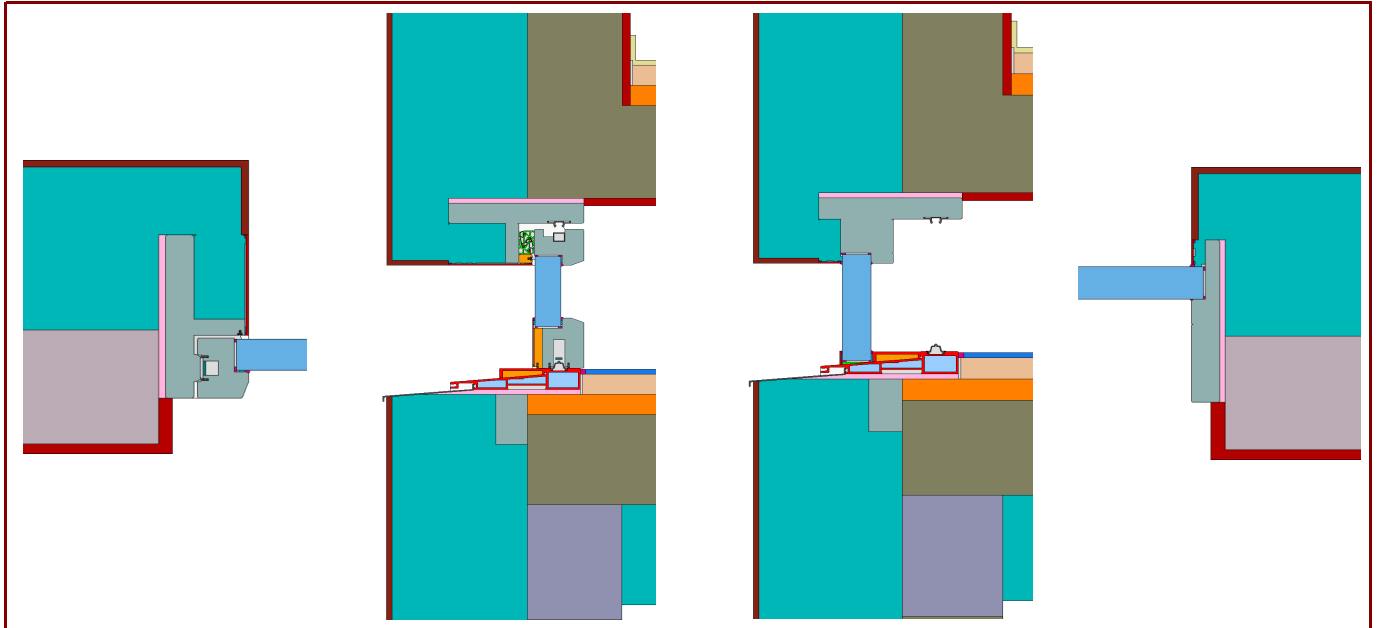


Passive House Efficiency Class



Data Sheet Slavona, s.r.o., HS Progression Plus

Installation



Installation based thermal bridge $\Psi_{\text{instal.}}$ in Passive House suitable walls

		EIFS Fixed glazing (Fix)	EIFS Sliding door (S)
Position			
Bottom	[W/(mK)]	0.001	0.008
Top	[W/(mK)]	-0.018	0.009
Side	[W/(mK)]	0.004	0.016
$U_{W, \text{instal.}}$	[W/(m ² K)]	0.79	

Explanatory notes

The window U-values were calculated based on a 2.40m by 2.50 m window $U_g = 0.70 \text{ W}/(\text{m}^2\text{K})$.
If better glazing is used, the window U-value decreases as following:

U Glazing	U_g [W/(m²K)]	0.66	0.60	0.54
U Window	U_w [W/(m²K)]	0.75	0.70	0.65

Depending on the thermal losses through opaque elements, transparent components are categorised according to efficiency classes. These thermal losses include the losses through the frame, multiplied by its width, the thermal bridge at the edge bond as well as the length of the edge bond.

Please ask the manufacturer for a detailed report containing all calculations and results.

For further information, please visit www.passivehouse.com or www.passipedia.org.