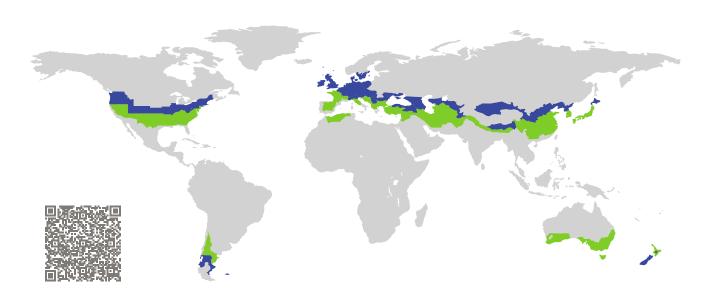
CERTIFICATE

Certified Passive House Component

Component-ID 1396wi03 valid until 31st December 2025

Passive House Institute Dr. Wolfgang Feist 64283 Darmstadt Germany



Category: Window Frame

Manufacturer: Harbin Sayyas Windows Stock Co.

Ltd.,

Wanggang Town Nangang Distr.

Harbin, China

Product name: PASSIVE 120C-138

This certificate was awarded based on the following criteria for the cool, temperate climate zone

 $\mbox{Comfort} \quad \textit{U}_{\textit{W}} = 0.80 \quad \leq \quad 0.80 \ \mbox{W}/(\mbox{m}^2 \ \mbox{K})$

 $U_{W,\text{installed}} \leq 0.85 \,\text{W/(m}^2 \,\text{K)}$ with $U_g = 0.70 \,\text{W/(m}^2 \,\text{K)}$

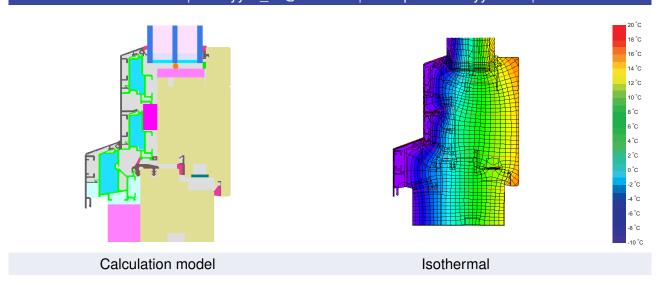
Hygiene $f_{Rsi=0.25}$ \geq 0.70





Harbin Sayyas Windows Stock Co. Ltd.

No. 9 Xinnong Road, 150088 Wanggang Town Nangang Distr. Harbin, China



Description

Timber-aluminium frame, insulated by EPS-foam (0.032 W/(mK)), PU-foam (0.027 W/(mK)) and PVC-foam (0.10 W/(mK)). Pane thickness: 51 mm (5/18/5/18/5), rebate depth: 15 mm. Spacer: MULTITECH with polyurethane as secondary seal.

Explanation

The window U-values were calculated for the test window size of 1.23 m \times 1.48 m with U_g = 0.70 W/(m² K). If a higher quality glazing is used, the window U-values will improve as follows:

Glazing
$$U_g = \begin{bmatrix} 0.70 & 0.64 & 0.58 & 0.52 & W/(m^2 \text{ K}) \\ \downarrow & \downarrow & \downarrow & \downarrow \\ Window $U_W = \begin{bmatrix} 0.80 & 0.77 & 0.74 & 0.70 & W/(m^2 \text{ K}) \\ \end{bmatrix}$$$

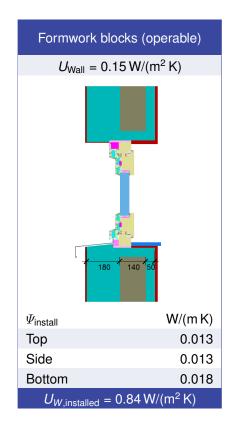
Transparent building components are classified into efficiency classes depending on the heat losses through the opaque part. The frame U-Values, frame widths, thermal bridges at the glazing edge, and the glazing edge lengths are included in these heat losses. A more detailed report of the calculations performed in the context of certification is available from the manufacturer.

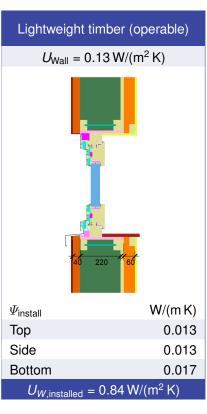
The Passive House Institute has defined international component criteria for seven climate zones. In principle, components which have been certified for climate zones with higher requirements may also be used in climates with less stringent requirements. In a particular climate zone it may make sense to use a component of a higher thermal quality which has been certified for a climate zone with more stringent requirements.

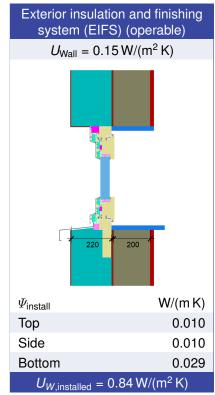
Further information relating to certification can be found on www.passivehouse.com and passipedia.org.

2/4 PASSIVE 120C-138

Validated installations







Frame values			Frame width <i>b_f</i> mm	<i>U</i> -value frame <i>U_f</i> W/(m² K)	Ψ -glazing edge Ψ_g W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Mullion 2 casements	(2M1)	1	304	0.82	0.021	0.76
Bottom	(OB1)	4	180	0.90	0.021	0.76
Тор	(OH1)	F	180	0.79	0.021	0.76
Lateral	(OJ1)	11	180	0.79	0.021	0.76
		Space	r: MULTITECH	Secondary seal: Polyurethan		

