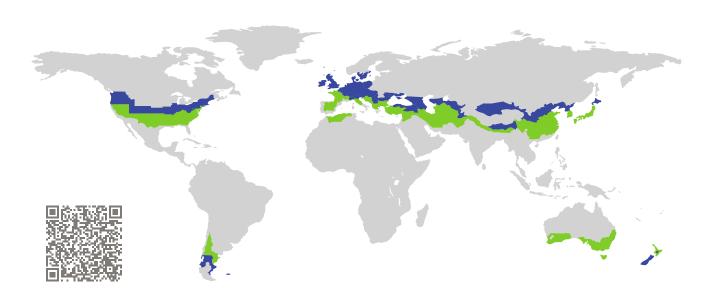
CERTIFICATE

Certified Passive House Component

Component-ID 0081wi03 valid until 31st December 2020

Passive House Institute Dr. Wolfgang Feist 64283 Darmstadt Germany



Category: Window Frame

Manufacturer: **REHAU AG + Co**,

Erlangen, Germany

Product name: REHAU GENEO PHZ

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

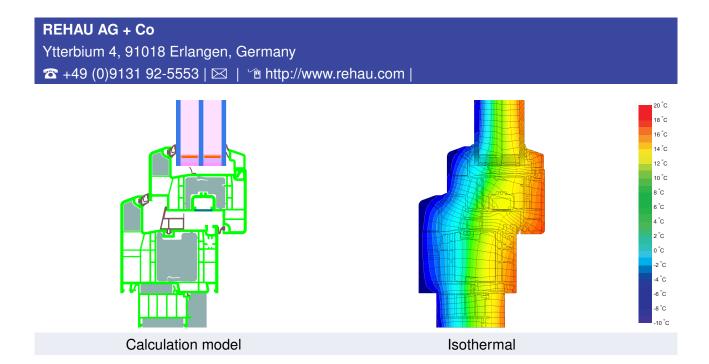
Comfort $U_W = 0.80 \le 0.80 \text{ W/(m}^2 \text{ K)}$

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

Hygiene $f_{Rsi=0.20}$ \geq 0.70







Description

Plastic frame

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
$$U_g = \begin{bmatrix} 0.70 & 0.64 & 0.58 & 0.53 & W/(m^2 \text{ K}) \\ \downarrow & \downarrow & \downarrow & \downarrow \\ Window $U_W = \begin{bmatrix} 0.80 & 0.77 & 0.73 & 0.70 & W/(m^2 \text{ K}) \end{bmatrix}$$$

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.

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Frame values			Frame width <i>b_f</i> mm	<i>U</i> -value frame <i>U_f</i> W/(m² K)	Ψ -panel edge Ψ_g W/(m K)	Temp. Factor f _{Rsi=0.20} [-]
Тор	(to)	Ť	131	0.79	0.030	0.80
Side	(s)	<u>u</u> —	131	0.79	0.030	0.80
Bottom	(bo)	Ţ	161	0.79	0.030	0.80
		Spacer: SWISSPACER V		Secondary seal: Polysulfid		

