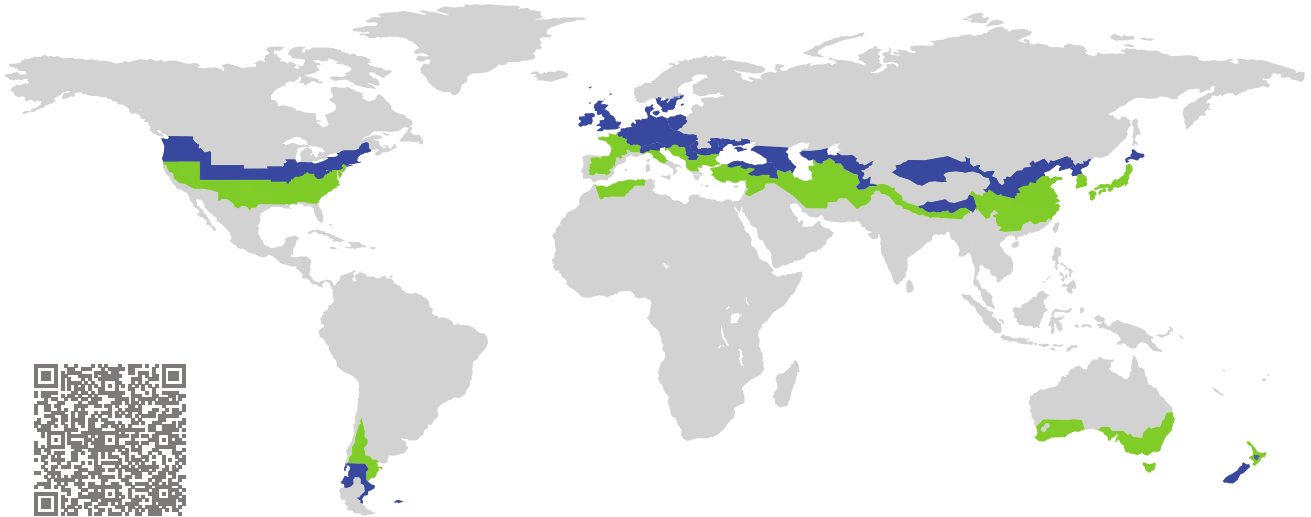


CERTIFICATE

Certified Passive House Component

Component-ID 2325wm03 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category: **Window mounting system**

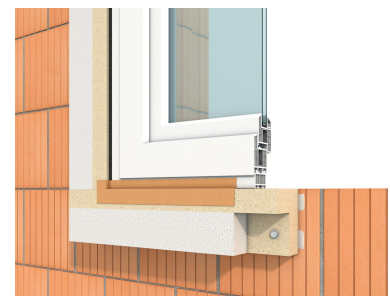
Manufacturer: **WARMOTECH GmbH,
Elsterwerda,
Germany**

Product name: **Phonotherm®**

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

Efficiency $\Delta U \leq 0.05 \text{ W}/(\text{m}^2 \cdot \text{K})$

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

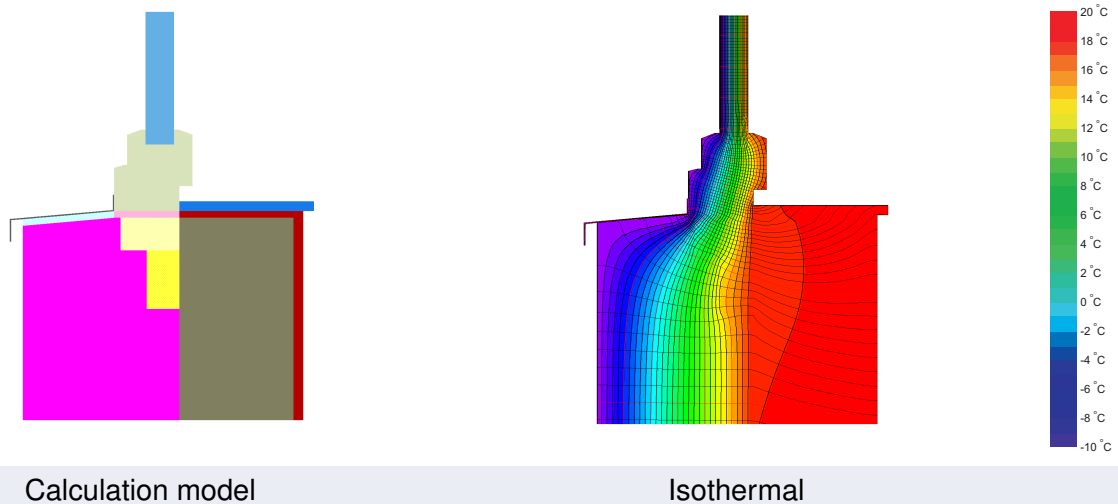


cool, temperate climate



**CERTIFIED
COMPONENT**

Passive House Institute



Description

Window installation system made of PUR rigid foam (0.083 W/(m K)), used as a base profile in the wall plane or as a facade installation system with adhesive and screws according to the manufacturer's specifications. Heat losses through the screws were determined by 3D heat flow simulation. The effective thermal conductivity with screws is 0.0867 W/(m K).

Explanation

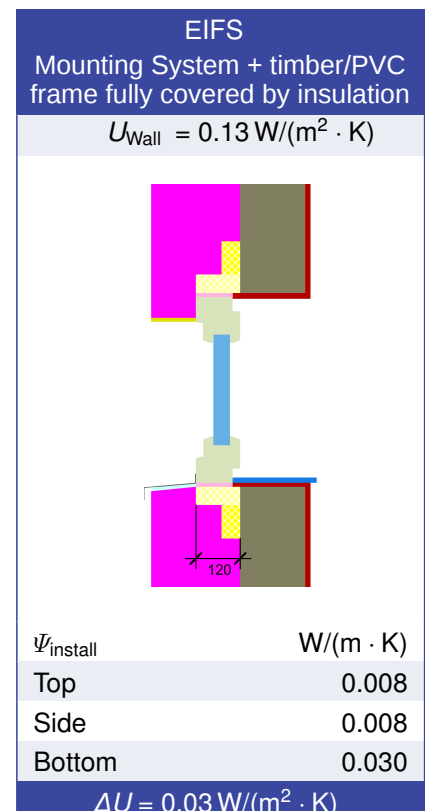
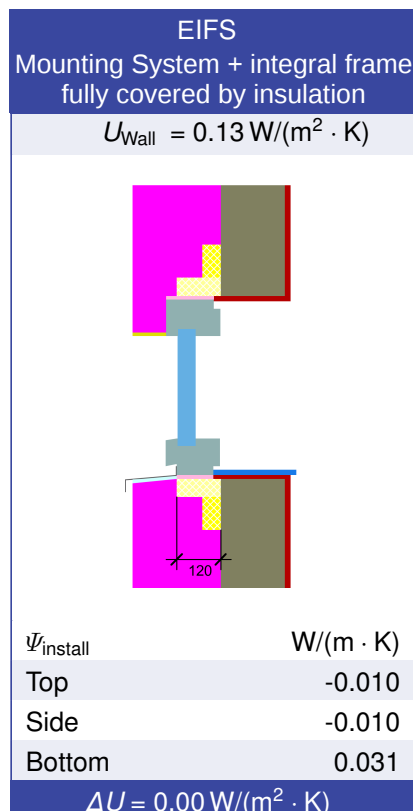
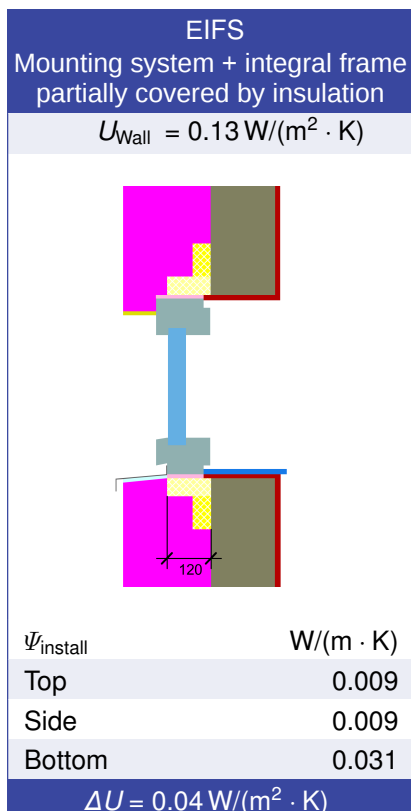
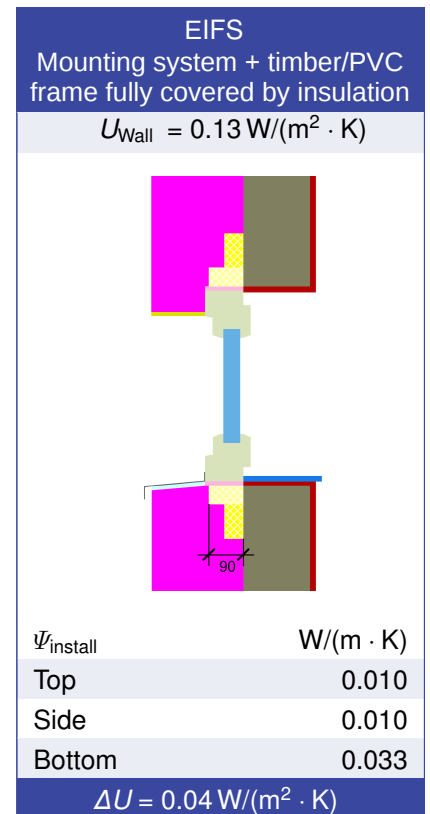
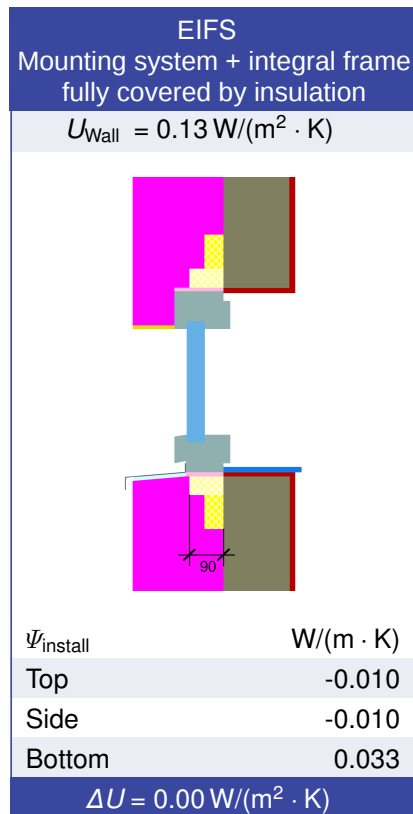
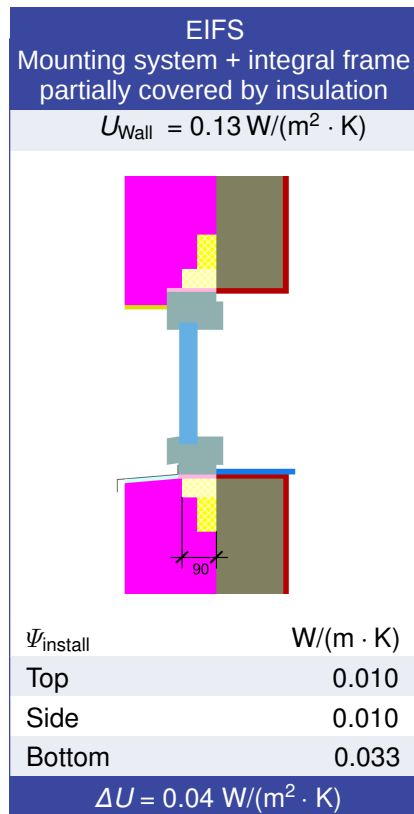
The certifiability is demonstrated by the increase of the heat transfer coefficient ΔU [W/(m².K)] caused by the installation thermal bridge (efficiency criterion) in conjunction with given installation situations and window frames as well as by the minimum temperature factor at the coldest point of the installation connection (hygiene criterion).

The heat transfer coefficients (U-values) and the thermal bridge loss coefficients (ψ -values) of the window are determined on the basis of DIN EN ISO 10077-2, the installation thermal bridges according to ISO 10211.

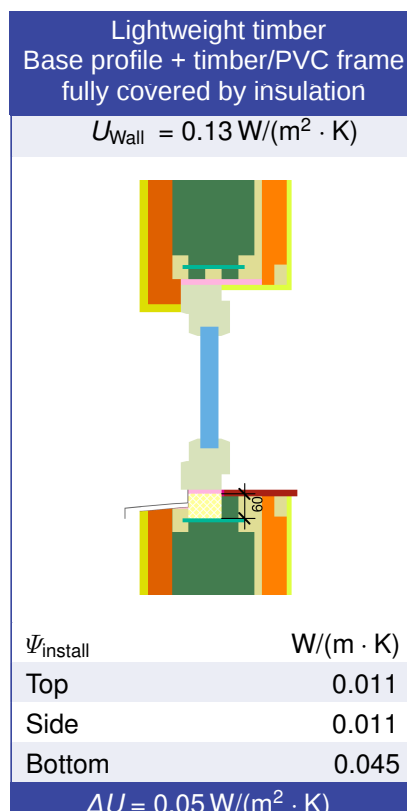
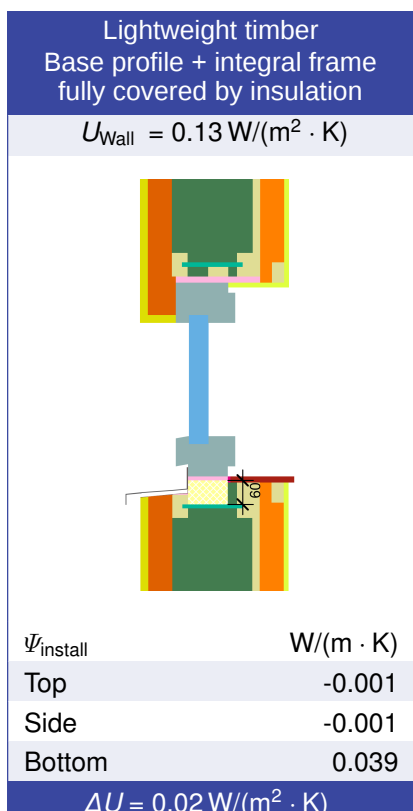
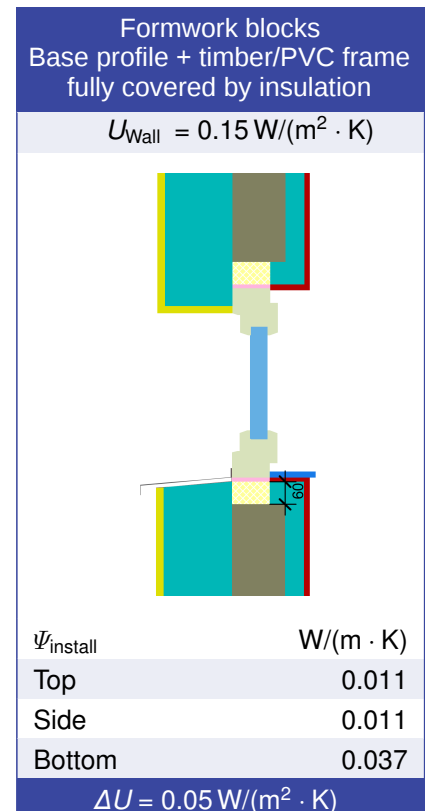
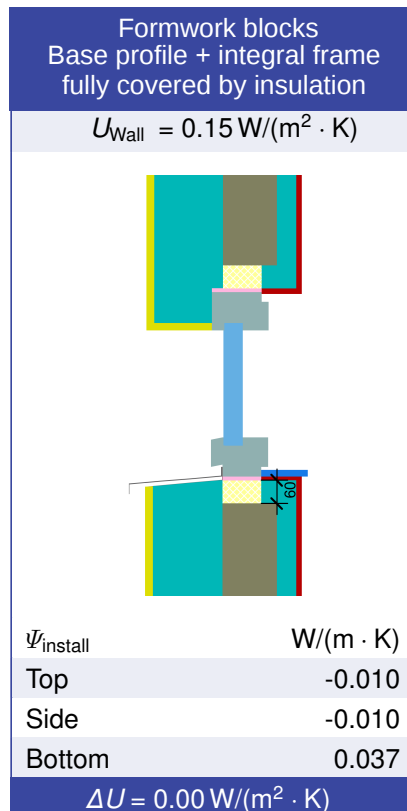
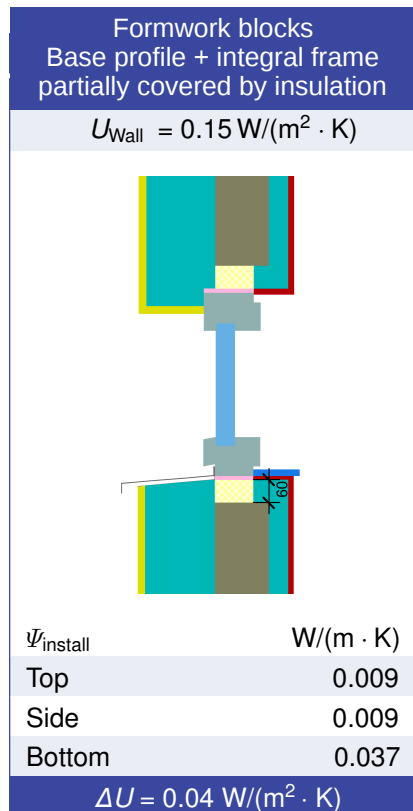
The Passive House Institute has defined international component criteria for seven climate zones. In principle, components which have been certified for climate zones with higher requirements may also be used in climates with less stringent requirements. In a particular climate zone it may make sense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

Validated installations



Validated installations



Integral Frame values		Frame width b_f mm	U -value frame U_f W/(m ² · K)	Ψ -glazing edge Ψ_g W/(m · K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Bottom	(OB1) 	100	0.90	0.026	0.70
Top	(OH1) 	100	0.79	0.026	0.70
Lateral	(OJ1) 	100	0.79	0.026	0.70
Spacer: PHI phA-Spacer			Secondary seal: Polysulfide		

Timber/PVC Frame values		Frame width b_f mm	U -value frame U_f W/(m ² · K)	Ψ -glazing edge Ψ_g W/(m · K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Bottom	(OB1) 	125	0.73	0.036	0.70
Top	(OH1) 	125	0.73	0.036	0.70
Lateral	(OJ1) 	125	0.73	0.036	0.70
Spacer: PHI phB-Spacer			Secondary seal: Polysulfide		

