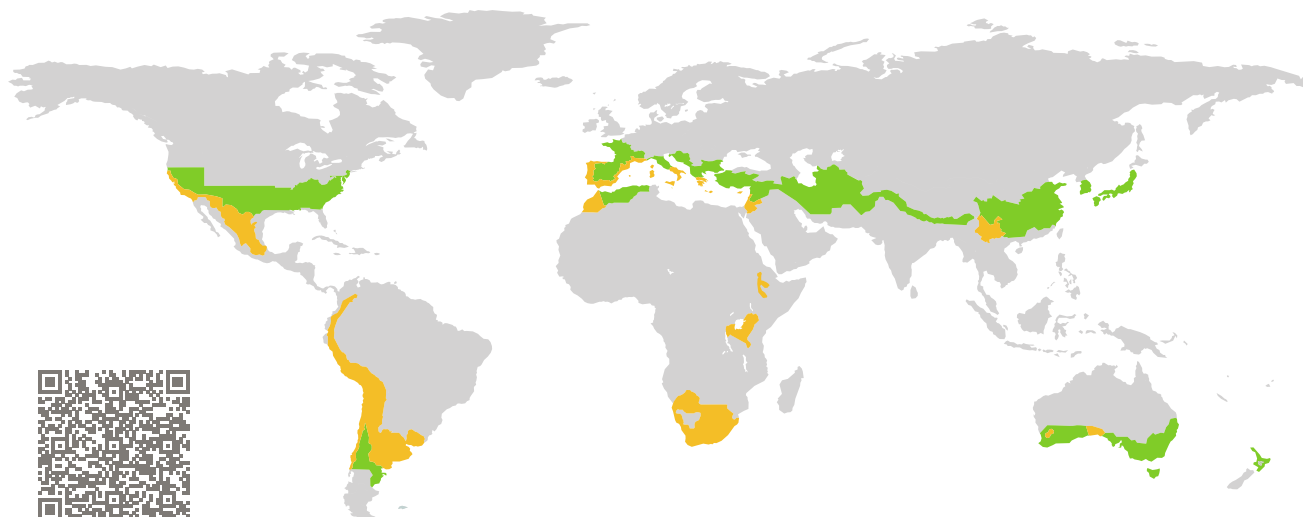


CERTIFICATO

Componente certificato Passive House

Componente-ID 2115ws04 valido fino 31 dicembre 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany

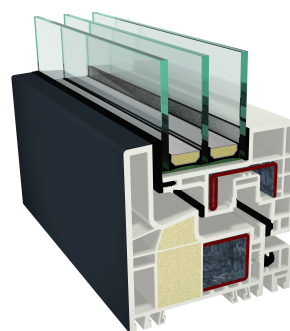


Categoria: **Sistema della finestra**
Produttore: **SC AGER-UNIKAT,
Intorsura Buzaului,
Romania**
Nome del prodotto: **MONT BLANC by UNIKAT**

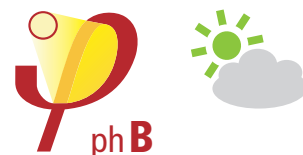
**Questo certificato è stato conseguito in conformità ai
seguenti criteri per le regioni a clima caldo-temperato**

Comfort $U_W = 1,00 \leq 1,00 \text{ W}/(\text{m}^2 \text{ K})$
 $U_{W, \text{installed}}$ $\leq 1,05 \text{ W}/(\text{m}^2 \text{ K})$
con $U_g = 0,90 \text{ W}/(\text{m}^2 \text{ K})$

Igiene $f_{Rsi=0,25} \geq 0,65$
Ermeticità $Q_{100} = 0,20 \leq 0,25 \text{ m}^3/(\text{h m})$



warm, temperate climate



**CERTIFIED
COMPONENT**

Passive House Institute

Passive House
efficiency class

phE

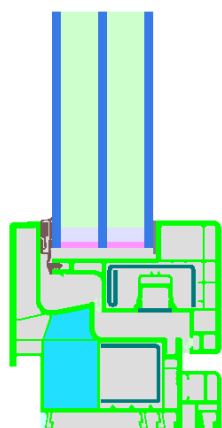
phD

phC

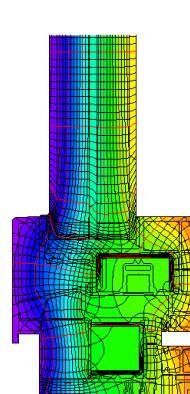
phB

phA

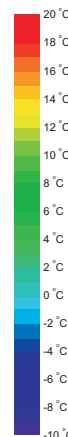
www.passivehouse.com



Modello di calcolo



Isotermico



Descrizione

Telaio in PVC con camera isolata in schiuma PU (IKD[®], 0,026 W/(mK)). Il fattore di temperatura richiesto non viene raggiunto alla soglia. La tenuta è stata approvata per una finestra-porta con parte fissa (3305 * 2546 mm). Telaio 5060 con rinforzo 8727, anta 5061 con rinforzo 5760, montante 5062 con rinforzo 5762 e 5260 con rinforzo 5763, montante 5063 con rinforzo 5767, soglia 2596/2576 e con rinforzo 5463 e 6105. Spessore pacchetto vetro 48mm (4/18/4/1 8/4), profondità della scanalatura: 18mm. Distantiatori: SWISSPACER Ultimate.

Spiegazione

I valori U della finestra sono stati calcolati per la finestra di prova con dimensioni 2,46 m × 1,48 m con $U_g = 0,90 \text{ W}/(\text{m}^2 \text{ K})$. Se viene utilizzato un vetro con qualità superiore, il valore U della finestra migliorerà nel modo seguente:

Vetro	$U_g =$	0,90	1,04	0,60	0,54	W/(m ² K)
		↓	↓	↓	↓	
Finestra	$U_W =$	1,00	1,10	0,77	0,72	W/(m ² K)

I componenti dell'involucro trasparente sono classificati nelle varie classi di efficienza energetica in base alle perdite termiche attraverso la parte opaca. La trasmittanza termica del telaio, la larghezza del telaio, i ponti termici al distanziatore e le dimensioni delle estremità del vetro sono considerati in queste perdite termiche. Una relazione più dettagliata dei calcoli eseguiti nello studio per la certificazione è stata rilasciata al produttore.


Il Passive House Institute ha definito i criteri per la certificazione internazionale dei componenti nelle sette zone climatiche. In principio, i componenti che sono stati certificati per le zone climatiche con requisiti più stringenti possono essere utilizzati in zone climatiche con requisiti meno rigorosi. In una particolare zona climatica si potrebbe utilizzare un componente con una qualità termica più elevata che è stato certificato per un clima con requisiti più stringenti.

Ulteriori informazioni riguardo la certificazione possono essere trovate sui siti www.passivehouse.com e passipedia.org.

Caratteristiche del telaio		Larghezza del telaio b_f mm	valore U telaio U_f W/(m ² K)	valore Ψ distanziatore Ψ_g W/(m K)	Fattore di temperatura $f_{Rsi=0,25}$ [-]
Mullion Fixed	(0M1) 	100	1,36	0,023	0,66
Transom fixed	(0T1) 	100	1,36	0,023	0,66
Mullion 1 casement	(1M1) 	100	1,36	0,023	0,66
Transom 1 casement	(1T1) 	100	1,36	0,023	0,66
Mullion 2 casements	(2M1) 	154	1,42	0,023	0,65
Transom 2 casements	(2T1) 	154	1,42	0,023	0,65
Bottom Fixed	(FB1) 	100	1,05	0,022	0,69
Top fixed	(FH1) 	100	0,98	0,023	0,70
Lateral fixed	(FJ1) 	100	0,98	0,023	0,70
Flying Mullion	(FM1) 	100	1,36	0,023	0,66
Bottom	(OB1) 	100	1,05	0,022	0,69
Top	(OH1) 	100	0,98	0,023	0,70
Lateral	(OJ1) 	100	0,98	0,023	0,70
Threshold	(OT2) 	74	2,50	0,024	0,56

Distanziatore: SWISSPACER Ultimate

Guarnizione secondaria: Polysulfide



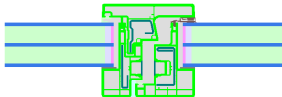
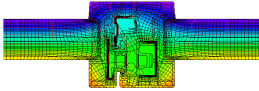
Mullion
Fixed


$b_f = 100$ mm

$U_f = 1,36$ W/(m² K)

$\Psi_g = 0,023$ W/(m K)

$f_{Rsi} = 0,66$




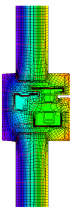
Transom
fixed

$b_f = 100$ mm

$U_f = 1,36$ W/(m² K)

$\Psi_g = 0,023$ W/(m K)

$f_{Rsi} = 0,66$



Mullion

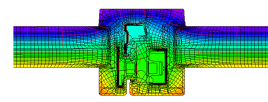
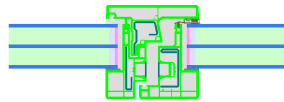
1 casement

$$b_f = 100 \text{ mm}$$

$$U_f = 1,36 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,66$$



Transom

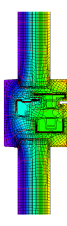
1 casement

$$b_f = 100 \text{ mm}$$

$$U_f = 1,36 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,66$$



Mullion

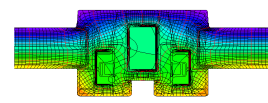
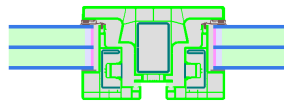
2 casements

$$b_f = 154 \text{ mm}$$

$$U_f = 1,42 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,65$$



Transom

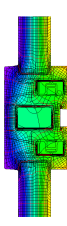
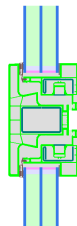
2 casements

$$b_f = 154 \text{ mm}$$

$$U_f = 1,42 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,65$$



Bottom

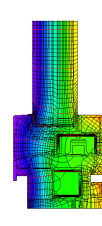
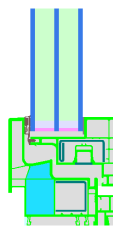
Fixed

$$b_f = 100 \text{ mm}$$

$$U_f = 1,05 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,022 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,69$$





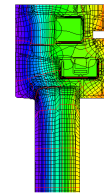
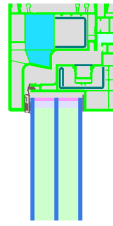
Top fixed

$$b_f = 100 \text{ mm}$$

$$U_f = 0,98 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,70$$



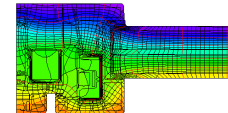
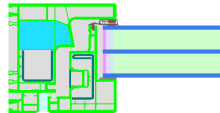
Lateral fixed

$$b_f = 100 \text{ mm}$$

$$U_f = 0,98 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,70$$



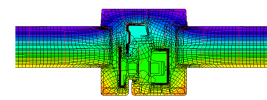
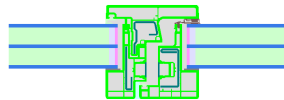
Flying Mullion

$$b_f = 100 \text{ mm}$$

$$U_f = 1,36 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,66$$



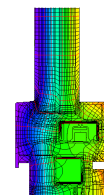
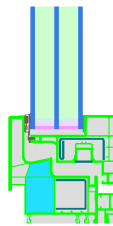
Bottom

$$b_f = 100 \text{ mm}$$

$$U_f = 1,05 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,022 \text{ W}/(\text{m K})$$

$$f_{Rsi} = 0,69$$



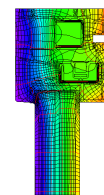
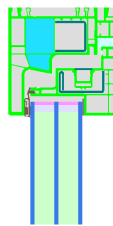
Top

$$b_f = 100 \text{ mm}$$

$$U_f = 0,98 \text{ W}/(\text{m}^2 \text{ K})$$

$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$

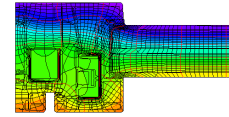
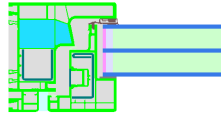
$$f_{Rsi} = 0,70$$





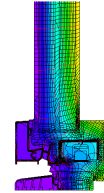
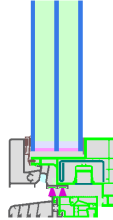
Lateral

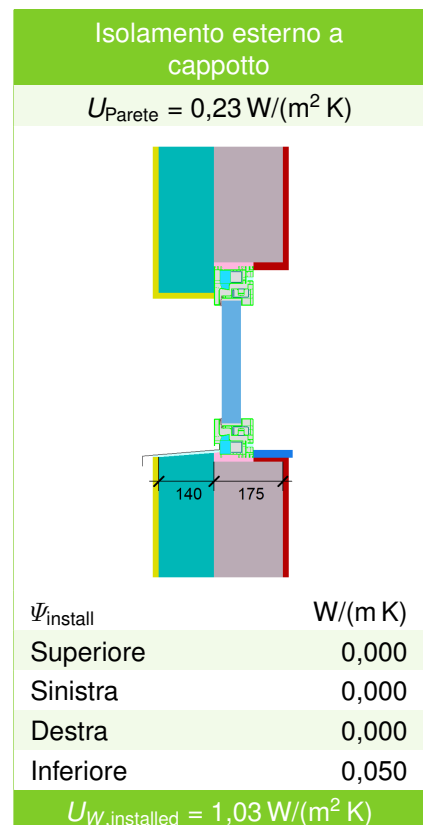
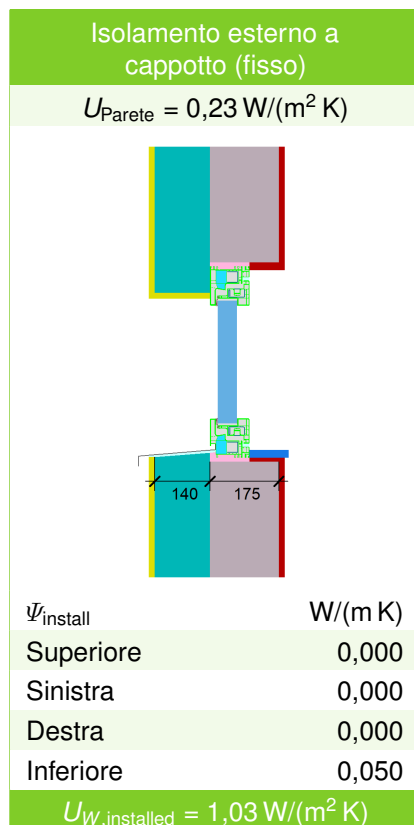
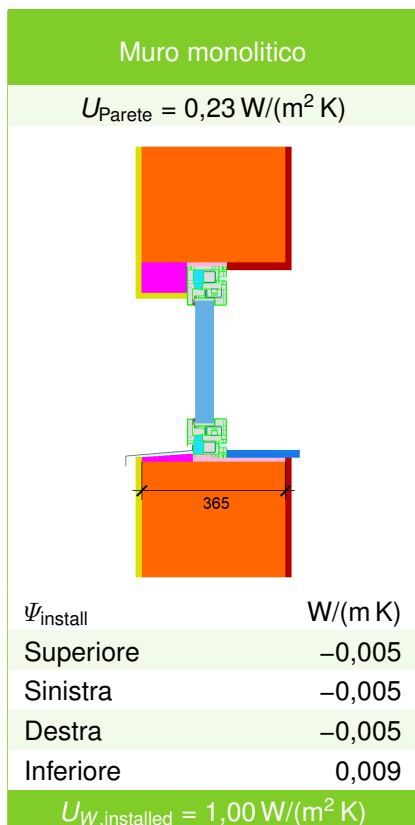
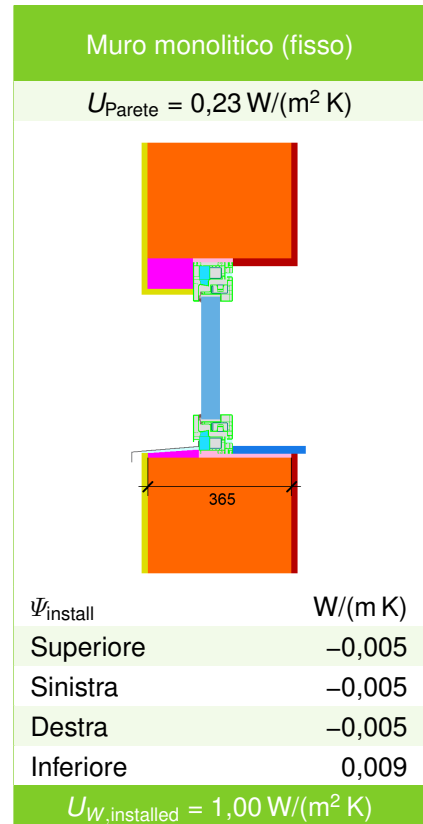
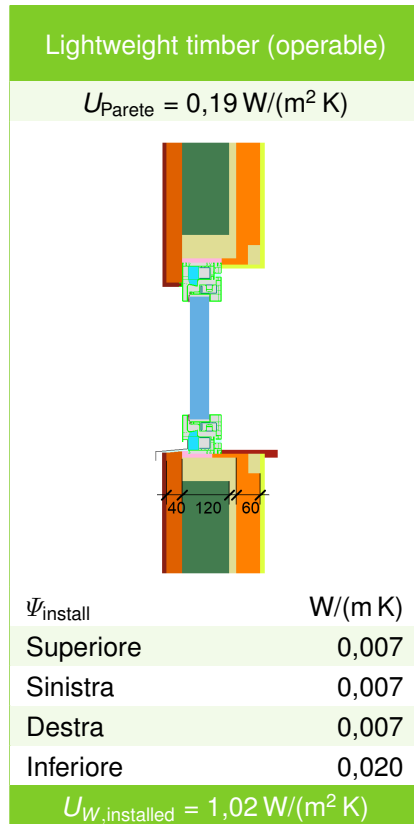
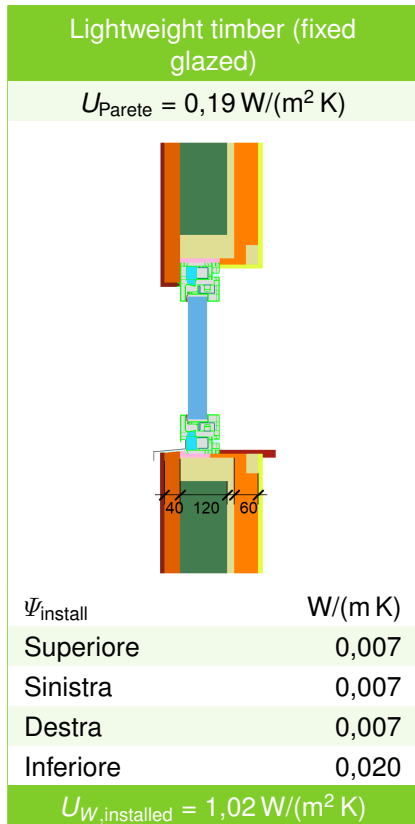
$$b_f = 100 \text{ mm}$$
$$U_f = 0,98 \text{ W}/(\text{m}^2 \text{ K})$$
$$\Psi_g = 0,023 \text{ W}/(\text{m K})$$
$$f_{Rsi} = 0,70$$



Threshold

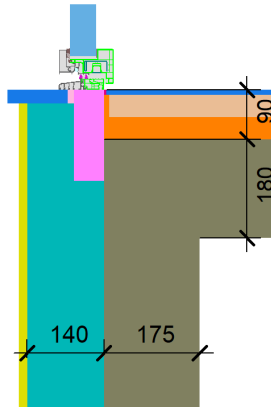
$$b_f = 74 \text{ mm}$$
$$U_f = 2,50 \text{ W}/(\text{m}^2 \text{ K})$$
$$\Psi_g = 0,024 \text{ W}/(\text{m K})$$
$$f_{Rsi} = 0,56$$





Ext insulation a. finish. s. (EIFS)
threshold ceiling (operable)

$$U_1 = 0,24 \text{ [W/(m}^2 \text{ K)]}$$



$$\Psi_{\text{install}} = 0,07 \text{ W/(m K)}$$