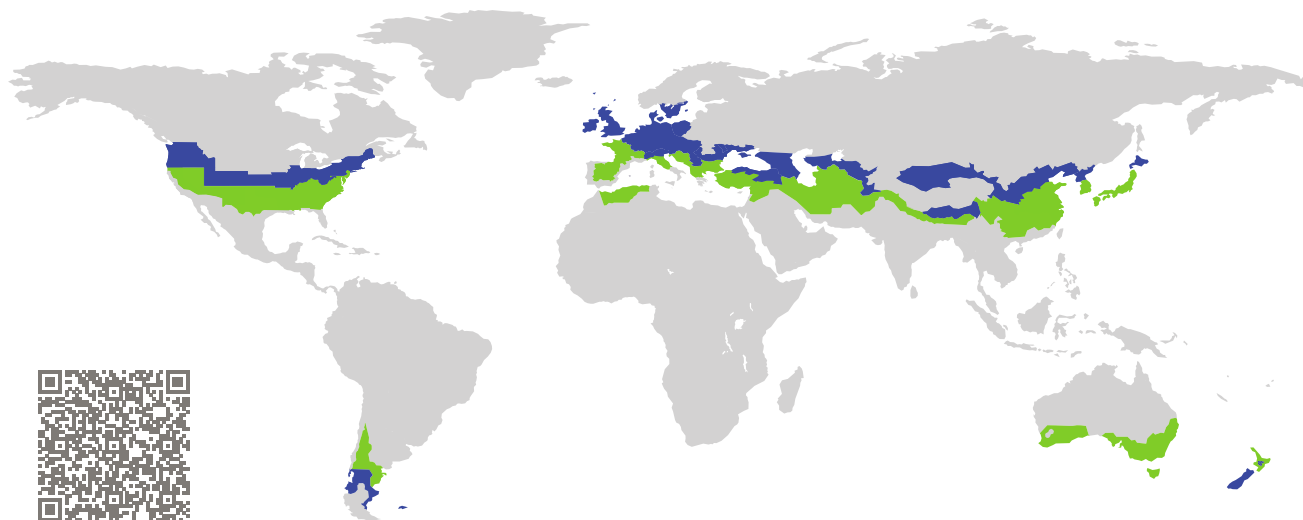


CERTIFICATE

Certified Passive House Component

Component-ID 2432wi03 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany

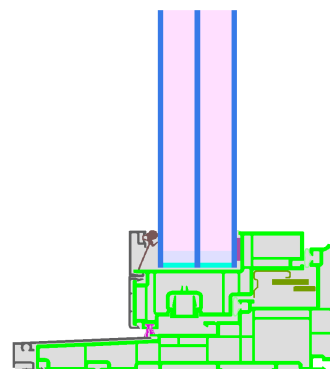


Category: **Window Frame**
Manufacturer: **Isothermic Portes et fenêtres,
Thetford Mines,
Canada**
Product name: **Série 2 Casement H1**

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

Comfort $U_W = 0.79 \leq 0.80 \text{ W}/(\text{m}^2 \text{ K})$
 $U_{W, \text{installed}}$ $\leq 0.85 \text{ W}/(\text{m}^2 \text{ K})$
with U_g $= 0.70 \text{ W}/(\text{m}^2 \text{ K})$

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



cool, temperate climate



**CERTIFIED
COMPONENT**

Passive House Institute

Passive House
efficiency class

phE

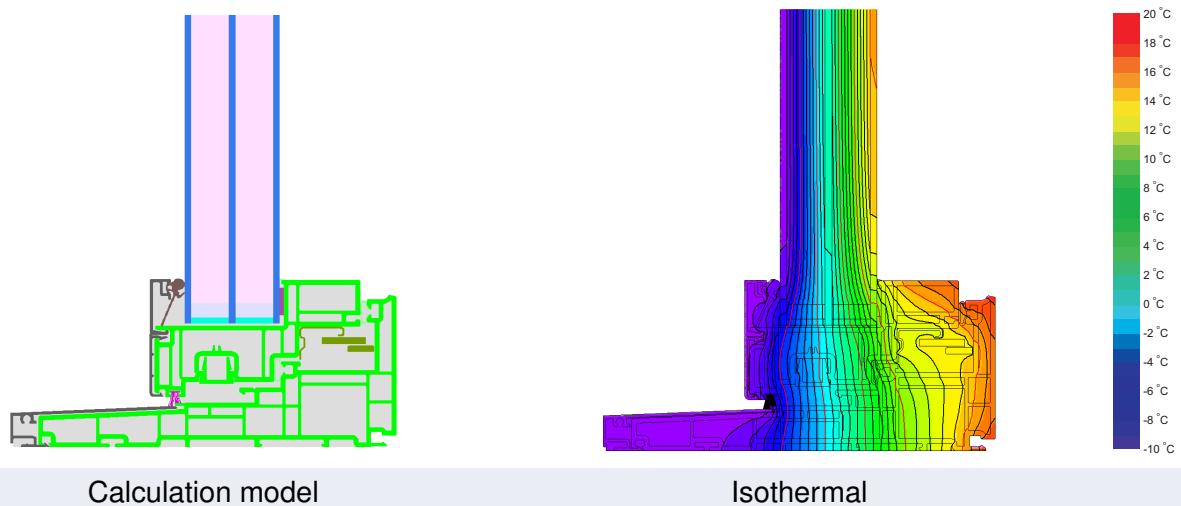
phD

phC

phB

phA

www.passivehouse.com



Description

Vinyl frame with aluminium cladding on the outside. Pane thickness: 44 mm (3/17.5/3/17.5/3). Rebate depth: 20 mm. Spacer: Swisspacer Ultimate. Secondary sealing: butyl. Maximum dimensions without fiberglass reinforcement: 0.813 m (width), 1.60 m (height). Using fiberglass reinforcement, the frame has an U_f -value of 0.97 W/(m².K) at the bottom and top sections, and 0.95 W/(m².K) at the side section. It is suitable for awning and casement windows.

Explanation

The window U-values were calculated for the test window size of 1.23 m × 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:

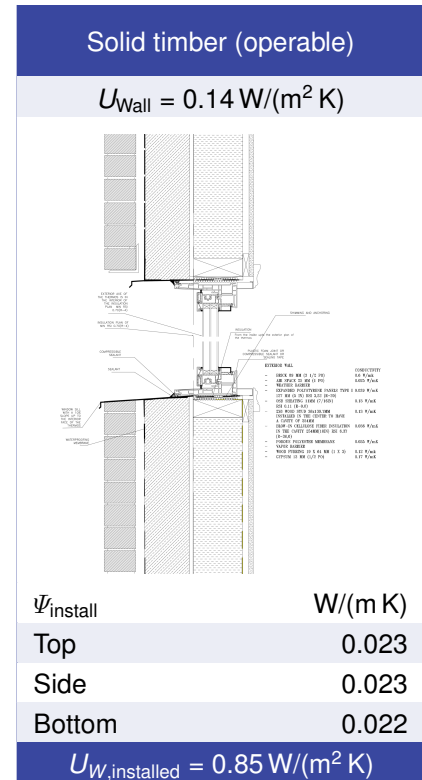
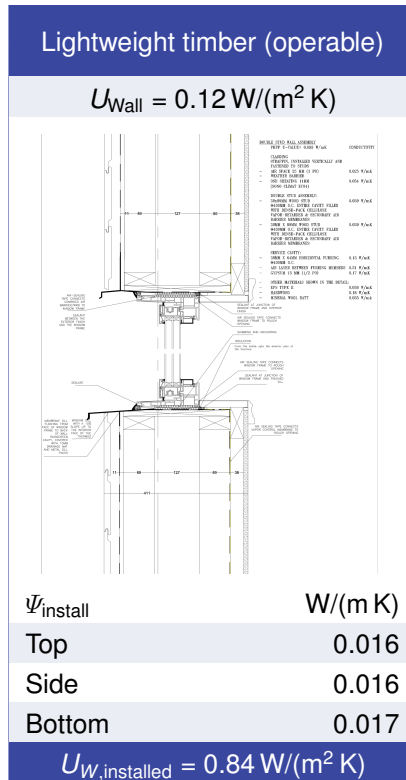
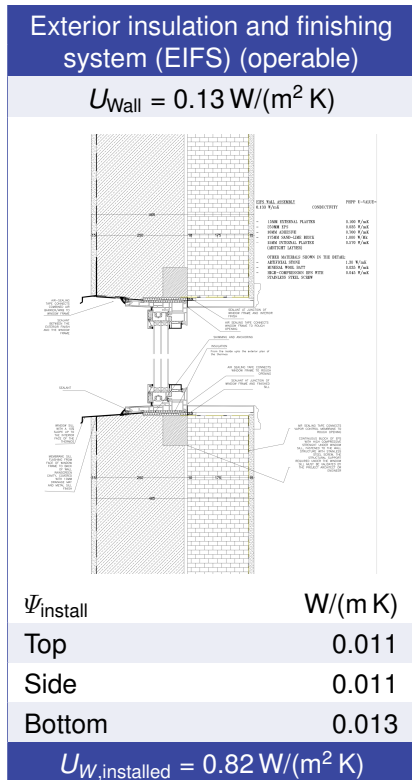
Glazing	$U_g =$	0.70	0.64	0.58	0.54	W/(m ² K)
		↓	↓	↓	↓	
Window	$U_W =$	0.79	0.74	0.69	0.66	W/(m ² K)

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.

Validated installations



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 $f_{Rsi=0.25}$ [-]
Mullion 1 casement	(1M1)	137	0.96	0.017	0.72
Transom 1 casement	(1T1)	137	0.96	0.017	0.72
Bottom	(OB1)	77	0.90	0.017	0.73
Top	(OH1)	77	0.90	0.017	0.73
Lateral	(OJ1)	77	0.89	0.017	0.72

Spacer: SWISSPACER ULTIMATE Secondary seal: Butyl

