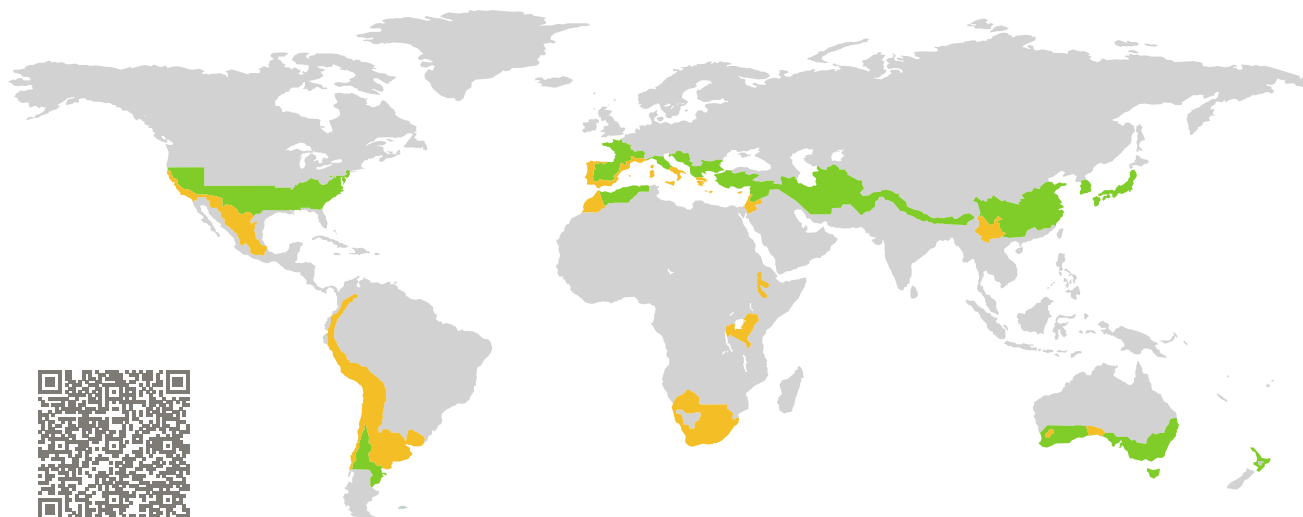


CERTIFICATE

Certified Passive House Component

Component-ID 1226wi04 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany

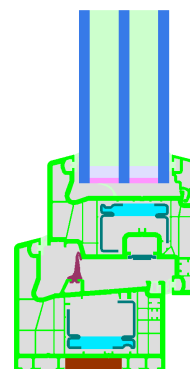


Category: **Window Frame**
Manufacturer: **Aluminios Cortizo S.A.U.,
Padron (A Coruna),
Spain**
Product name: **A84 Passivhaus 1.0 RPT**

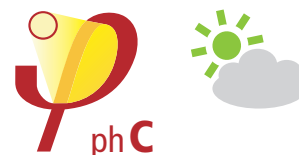
**This certificate was awarded based on the following
criteria for the warm, temperate climate zone**

Comfort $U_W = 1.00 \leq 1.00 \text{ W}/(\text{m}^2 \text{ K})$
 $U_{W, \text{installed}}$ $\leq 1.05 \text{ W}/(\text{m}^2 \text{ K})$
with U_g $= 0.90 \text{ W}/(\text{m}^2 \text{ K})$

Hygiene $f_{Rsi=0.25} \geq 0.65$



warm, temperate climate



**CERTIFIED
COMPONENT**

Passive House Institute

Passive House
efficiency class

phE

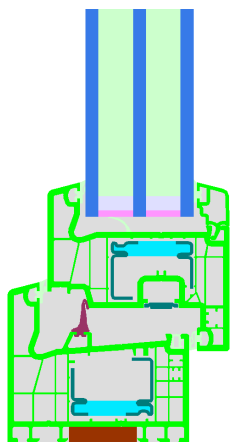
phD

phC

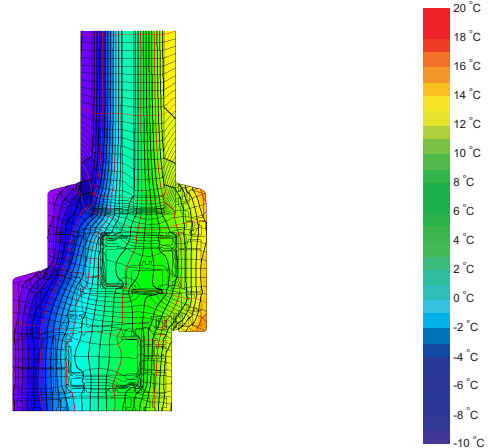
phB

phA

www.passivehouse.com



Calculation model



Isothermal

Description

PVC window frame, Pane thickness: 50 mm (6/16/6/16/6), rebate depth: 16 mm, spacer: SWIS-SPACER Ultimate

Explanation

The window U-values were calculated for the test window size of 1.23 m × 1.48 m with $U_g = 0.90 \text{ W}/(\text{m}^2 \text{ K})$. If a higher quality glazing is used, the window U-values will improve as follows:

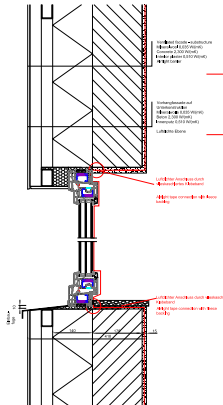
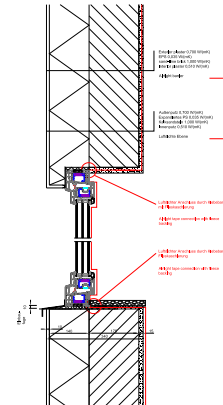
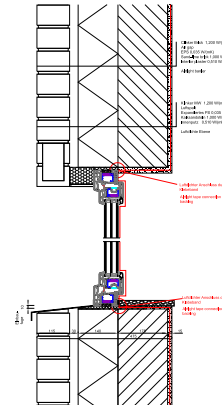
Glazing	$U_g =$	0.90	0.70	0.64	0.58	$\text{W}/(\text{m}^2 \text{ K})$
		↓	↓	↓	↓	
Window	$U_W =$	1.00	0.87	0.83	0.79	$\text{W}/(\text{m}^2 \text{ K})$


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

Ventilated facade		Exterior insulation and finishing system (EIFS) (operable)		Cavity wall	
$U_{Wall} = 0.22 \text{ W}/(\text{m}^2 \text{ K})$		$U_{Wall} = 0.23 \text{ W}/(\text{m}^2 \text{ K})$		$U_{Wall} = 0.22 \text{ W}/(\text{m}^2 \text{ K})$	
					
$\Psi_{install}$	W/(m K)	$\Psi_{install}$	W/(m K)	$\Psi_{install}$	W/(m K)
Top	-0.005	Top	-0.005	Top	-0.005
Side	-0.005	Side	-0.005	Side	-0.005
Bottom	0.012	Bottom	0.011	Bottom	0.012
$U_{W,installed} = 1.00 \text{ W}/(\text{m}^2 \text{ K})$		$U_{W,installed} = 1.00 \text{ W}/(\text{m}^2 \text{ K})$		$U_{W,installed} = 1.00 \text{ W}/(\text{m}^2 \text{ K})$	

Frame values		Frame width	U -value frame	Ψ -glazing edge	Temp. Factor
		b_f	U_f	Ψ_g	$f_{Rsi=0.25}$
		mm	W/(m ² K)	W/(m K)	[-]
Flying Mullion	(FM1) 	164	0.96	0.027	0.69
Bottom	(OB1) 	120	1.01	0.028	0.71
Top	(OH1) 	120	1.01	0.028	0.71
Lateral	(OJ1) 	120	1.01	0.028	0.71
Spacer: SWISSPACER Ultimate			Secondary seal: Polysulfide		

