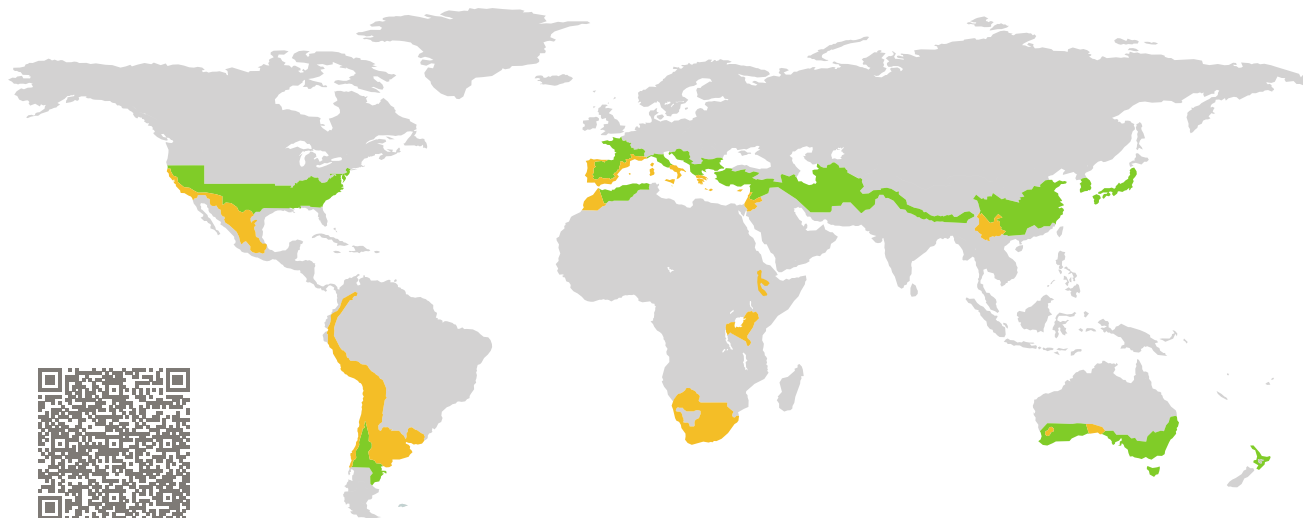


CERTIFICADO

Componente certificado Passive House

ID de componente 1701ws04 válido até ?today?

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Alemanha

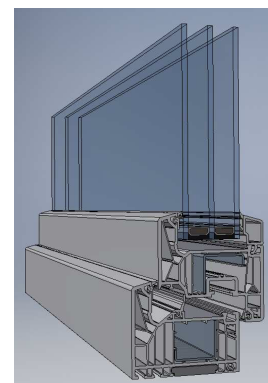


Categoria: **Sistema de janela**
Fabricante: **Schüco Iberia S.L.,
Valdemoro (Madrid),
Spain**
Nome do produto: **Schüco Living 82 MD**

Este certificado foi concedido com base nos seguintes critérios para a zona de clima quente-temperado

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

Higiene $f_{Rsi=0,25} \geq 0,65$
Estanqueidade $Q_{100} = 0,19 \leq 0,25 \text{ m}^3/(\text{h m})$



Passive House
efficiency class

phE

phD

phC

phB

phA

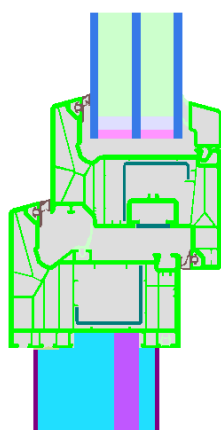
www.passivehouse.com

warm, temperate climate

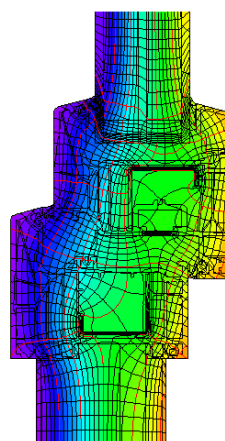


**CERTIFIED
COMPONENT**

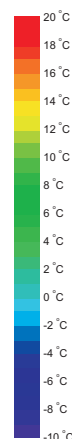
Passive House Institute



Modelo de cálculo



Isotérmicas



Descrição

Perfis de PVC com reforço de aço para janelas. Isolamento XPS (0,030 W / (mK)). Valor de estanqueidade de 0,19 m³ / (h * m) fornecido em uma porta de terraço com inversor, 168 cm * 257 cm. Espessura do vidro 44 mm (4/16/4/16/4), Altura de embutimento: 20 mm. Perfil intercalar: SWISSPACER Ultimate.

Explicação

Os valores U para a janela foram calculados para um tamanho de amostra de 2,46 m × 1,48 m com $U_g = 0,90$ W/(m² K) calculado. Se for usado vidro de qualidade superior, os valores U da janela serão reduzidos da seguinte forma:

Vidro	$U_g =$	0,90	0,58	0,64	0,70	W/(m ² K)
		↓	↓	↓	↓	
Janela	$U_w =$	1,00	0,79	0,83	0,87	W/(m ² K)

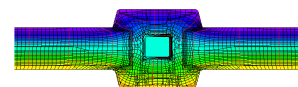
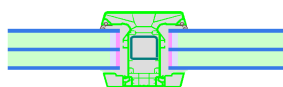
Os componentes de construção transparentes são classificados em categorias de eficiência, dependendo das perdas de calor através da parte opaca. Os valores U do aro, as larguras dos aros, as pontes térmicas e larguras do perfil intercalar estão incluídos nessas perdas de calor. O relatório detalhado com os cálculos efetuados no âmbito desta certificação encontra-se à disposição do fabricante.

Valores do aro		Largura do aro b_f mm	Valor- U aro U_f W/(m ² K)	Valor- Ψ perfil intercalar Ψ_g W/(m K)	Factor de temperatura $f_{Rsi=0,25}$ [-]
Mullion Fixed	(0M1) 	92	0,98	0,025	0,68
Mullion Fixed	(0M2) 	112	1,10	0,026	0,68
Transom fixed	(0T1) 	92	0,98	0,025	0,68
Mullion 1 casement	(1M1) 	142	1,05	0,026	0,68
Mullion 1 casement	(1M2) 	162	1,11	0,026	0,68
Transom 1 casement	(1T1) 	142	1,05	0,026	0,68
Mullion 2 casements	(2M1) 	192	1,08	0,026	0,70
Transom 2 casements	(2T1) 	192	1,08	0,026	0,70
Bottom Fixed	(FB1) 	110	0,86	0,026	0,69
Top fixed	(FH1) 	70	0,98	0,025	0,69
Jamb fixed	(FJ1) 	70	0,98	0,025	0,69
Flying Mullion	(FM1) 	174	1,04	0,026	0,69
Bottom	(OB1) 	160	0,96	0,026	0,70
Head	(OH1) 	120	1,05	0,026	0,70
Jamb	(OJ1) 	120	1,05	0,026	0,70
Threshold	(OT4) 	88	1,26	0,025	0,67
Threshold	(OT5) 	88	1,44	0,025	0,66
perfil intercalar: Swisspacer Ultimate			Vedação secundária: Polysulfide		



Mullion Fixed

$b_f = 92 \text{ mm}$
 $U_f = 0,98 \text{ W/(m}^2 \text{ K)}$
 $\Psi_g = 0,025 \text{ W/(m K)}$
 $f_{Rsi} = 0,68$





Mullion

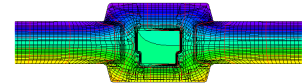
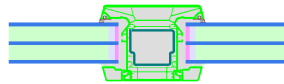
Fixed

$$b_f = 112 \text{ mm}$$

$$U_f = 1,10 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

$$f_{Rsi} = 0,68$$



Transom

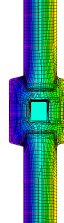
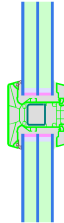
fixed

$$b_f = 92 \text{ mm}$$

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

$$\Psi_g = 0,025 \text{ W/(m K)}$$

$$f_{Rsi} = 0,68$$



Mullion

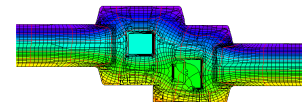
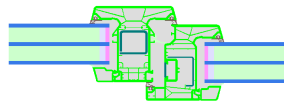
1 casement

$$b_f = 142 \text{ mm}$$

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

$$\Psi_g = 0,026 \text{ W/(m K)}$$

$$f_{Rsi} = 0,68$$



Mullion

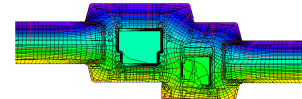
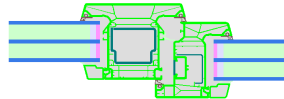
1 casement

$$b_f = 162 \text{ mm}$$

$$U_f = 1,11 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

$$f_{Rsi} = 0,68$$



Transom

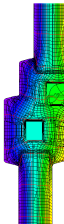
1 casement

$$b_f = 142 \text{ mm}$$

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

$$\Psi_g = 0,026 \text{ W/(m K)}$$

$$f_{Rsi} = 0,68$$



Mullion

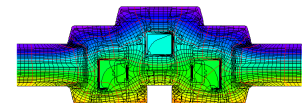
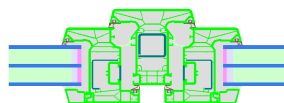
2 casements

$$b_f = 192 \text{ mm}$$

$$U_f = 1,08 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

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





Transom

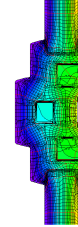
2 casements

$$b_f = 192 \text{ mm}$$

$$U_f = 1,08 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

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



Bottom

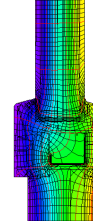
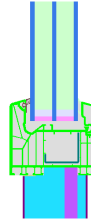
Fixed

$$b_f = 110 \text{ mm}$$

$$U_f = 0,86 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

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



Top

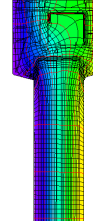
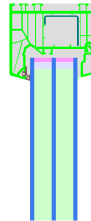
fixed

$$b_f = 70 \text{ mm}$$

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

$$\Psi_g = 0,025 \text{ W/(m K)}$$

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



Jamb

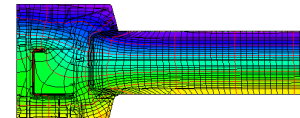
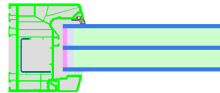
fixed

$$b_f = 70 \text{ mm}$$

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

$$\Psi_g = 0,025 \text{ W/(m K)}$$

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



Flying

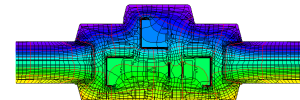
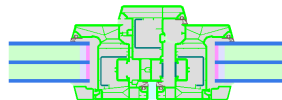
Mullion

$$b_f = 174 \text{ mm}$$

$$U_f = 1,04 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

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



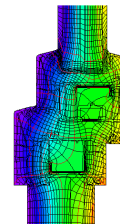
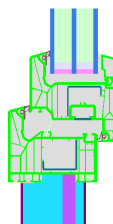
Bottom

$$b_f = 160 \text{ mm}$$

$$U_f = 0,96 \text{ W/(m}^2 \text{ K)}$$

$$\Psi_g = 0,026 \text{ W/(m K)}$$

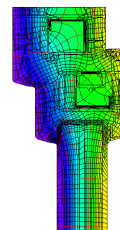
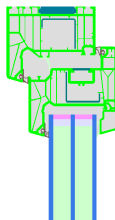
$$f_{Rsi} = 0,70$$





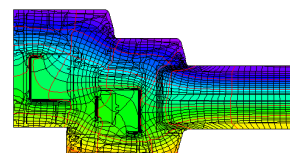
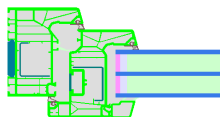
Head

$$b_f = 120 \text{ mm}$$
$$U_f = 1,05 \text{ W/(m}^2 \text{ K)}$$
$$\Psi_g = 0,026 \text{ W/(m K)}$$
$$f_{Rsi} = 0,70$$



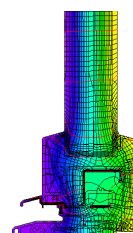
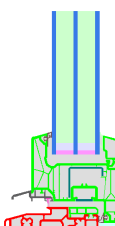
Jamb

$$b_f = 120 \text{ mm}$$
$$U_f = 1,05 \text{ W/(m}^2 \text{ K)}$$
$$\Psi_g = 0,026 \text{ W/(m K)}$$
$$f_{Rsi} = 0,70$$



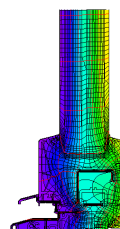
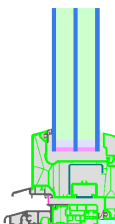
Threshold

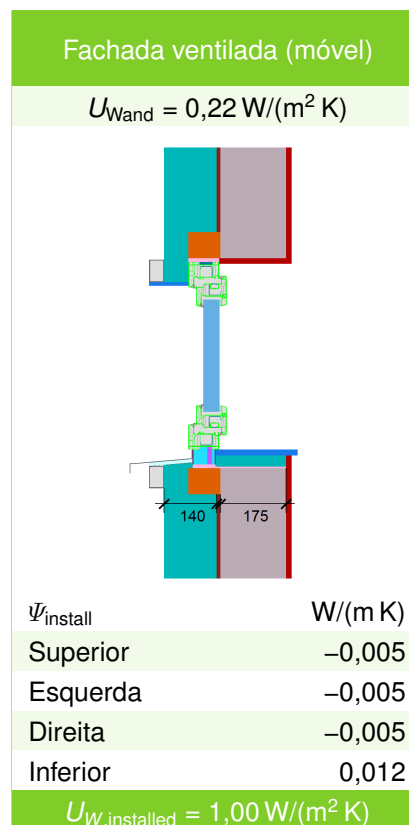
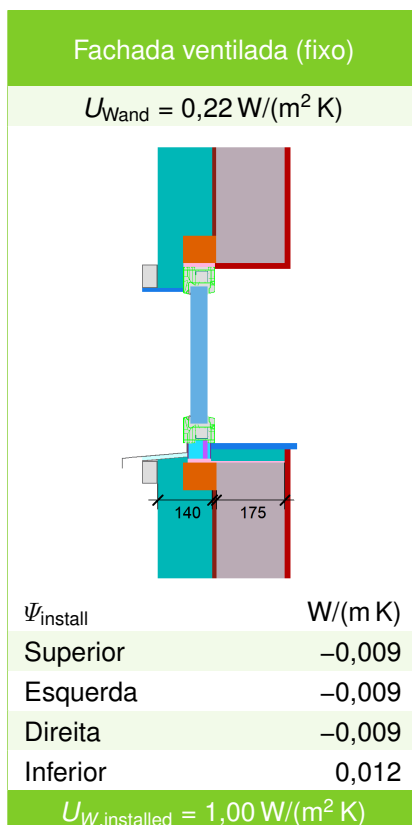
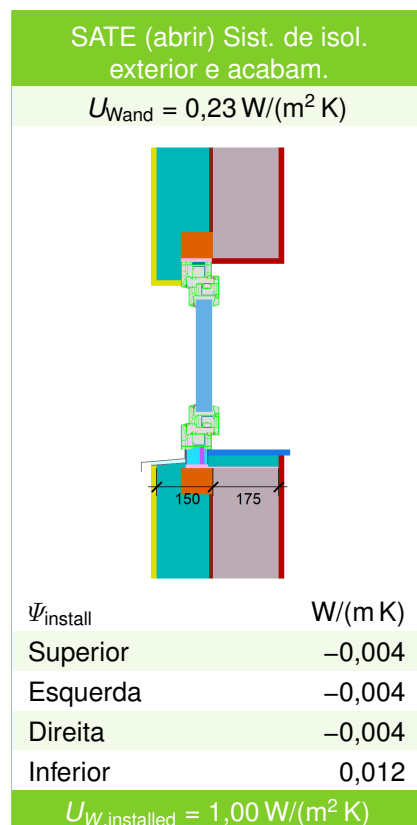
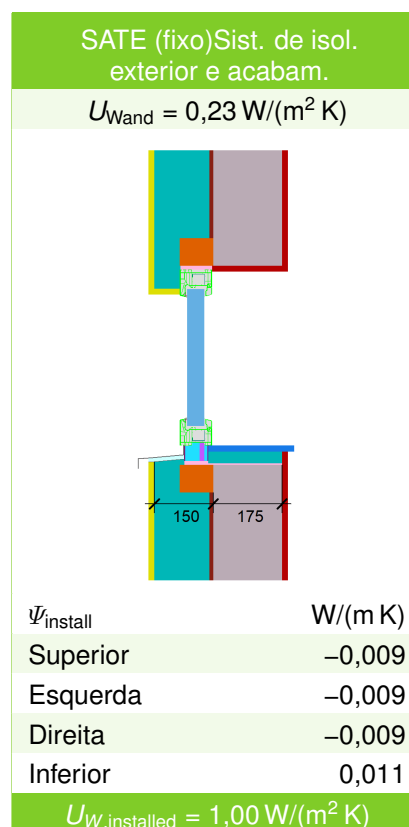
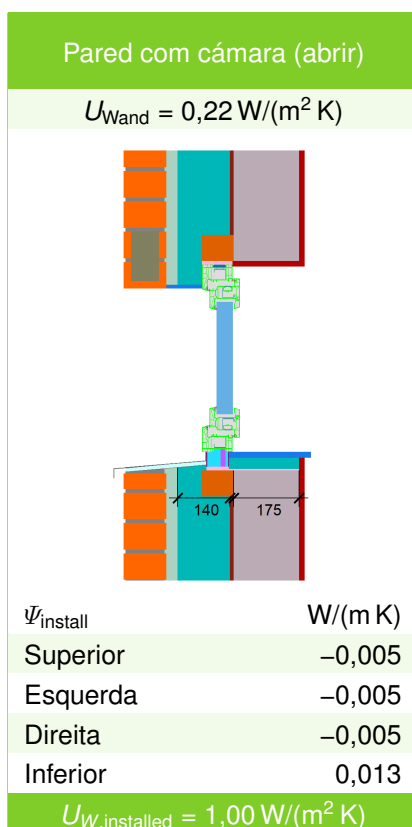
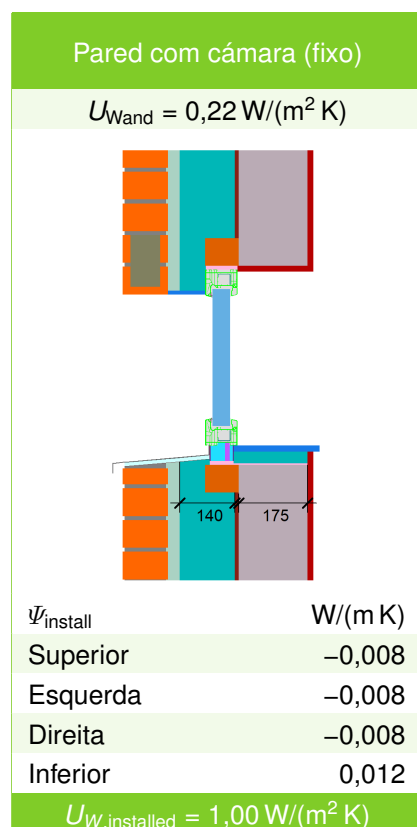
$$b_f = 88 \text{ mm}$$
$$U_f = 1,26 \text{ W/(m}^2 \text{ K)}$$
$$\Psi_g = 0,025 \text{ W/(m K)}$$
$$f_{Rsi} = 0,67$$



Threshold

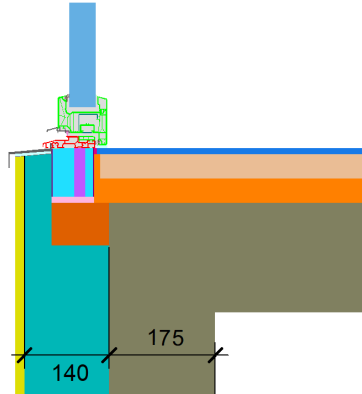
$$b_f = 88 \text{ mm}$$
$$U_f = 1,44 \text{ W/(m}^2 \text{ K)}$$
$$\Psi_g = 0,025 \text{ W/(m K)}$$
$$f_{Rsi} = 0,66$$





SATE Porta de entrada (abrir) Sist. de
isol. exterior e acabam.

$$U_1 = 0,23 \quad [\text{W}/(\text{m}^2 \text{ K})]$$



$$\Psi_{\text{install}} = 0,031 \text{ W}/(\text{m K})$$

Disclaimer: The Passive House Institute GmbH (PHI) conducts heat-transfer analyses in accordance with the standards set out in Criteria and Algorithms for Certified Passive House Components: Transparent Building Components and Opening Elements in the Building Envelope, based on information provided by the manufacturer. PHI does not verify on-site implementation. It is the responsibility of the project leader to ensure that installed components match the certified specifications in terms of geometry, configuration, and materials. Manufacturers must make full product information available upon request to parties involved in a construction project. These parties may compare the provided information with project documentation and perform on-site inspections as part of the quality-assurance process.