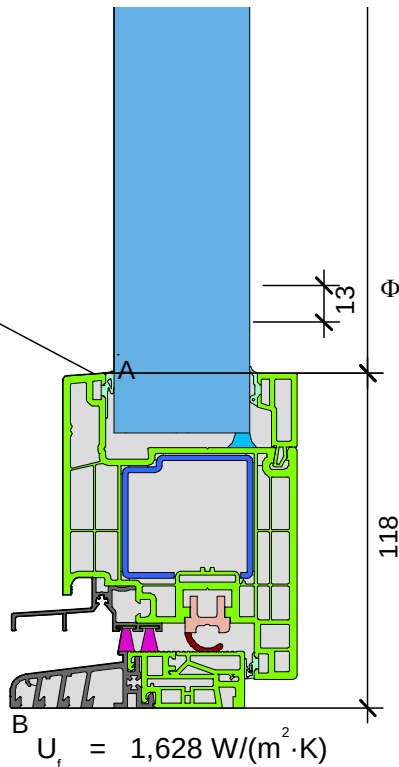


Material

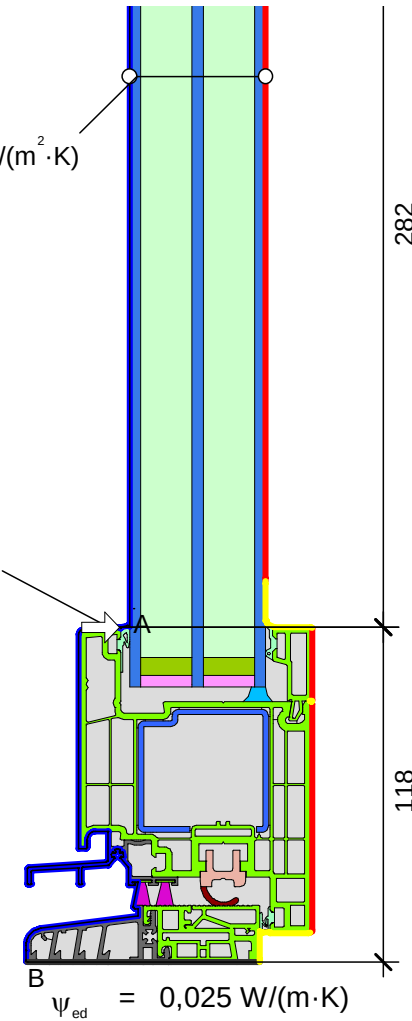
Aluminium (Si-Legierungen)	160,000	0,900
Ar18 in 48 mm U 0,9	0,039	0,900
Bürstendichtung (polyesterbeschichtetes Mohair)	0,140	0,900
EPDM (1)	0,250	0,900
Flüssigdichtung	0,350	0,900
Glass / Glas	1,000	0,900
Hart-Polyvinylchlorid (PVC) (1)	0,170	0,900
Hart-Polyvinylchlorid (PVC) (1)	0,170	0,900
Polysulfide / Polysulfid	0,400	0,900
Stahl (1)	50,000	0,300
TwoBox2 Ultimate Swisspacer	0,140	0,900
Unbelüftete Hohlräume (1) *		
Unvent. cavity unbel. Hohlr.		
Weich-Polyvinylchlorit (PVC-P) (1)	0,140	0,900

* EN ISO 10077-2:2017, 6.4.2

$$\Phi_B = -11,25070 \text{ W/m}$$

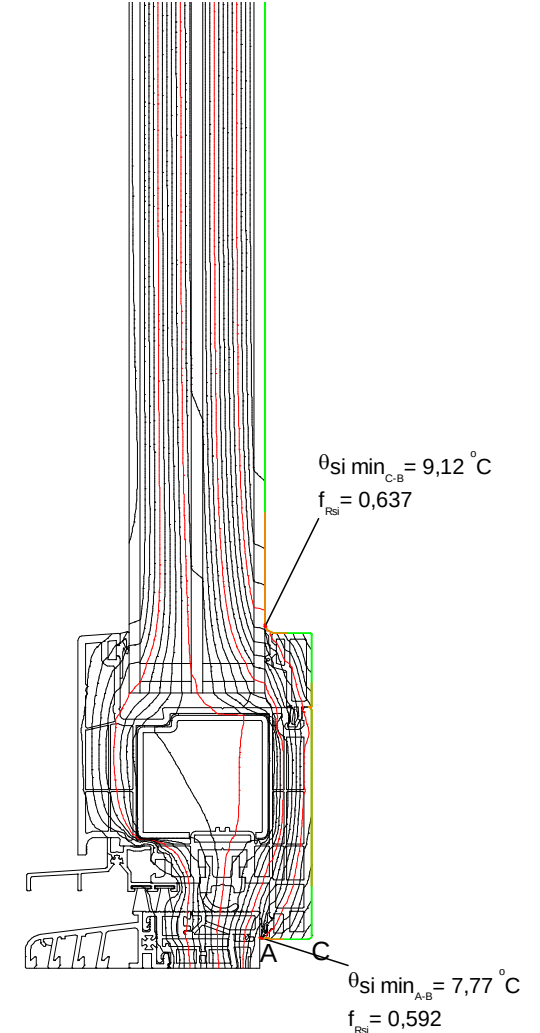


$$\Phi_B = -14,14099 \text{ W/m}$$



Randbedingung	$\theta_{\text{°C}}$	$R[(\text{m}^2 \cdot \text{K})/\text{W}]$
Adiabatic Adiabat		
Exterior Außen	-10,000	0,040
Interior, frame, normal	20,000	0,130
Interior, frame, reduced	20,000	0,200

Randbedingung	$\theta_{\text{°C}}$	$R[(\text{m}^2 \cdot \text{K})/\text{W}]$
Exterior Außen	-10,000	0,040
fRsi: Interior Innen	20,000	0,250
Adiabatic Adiabat		



$$\theta_{\text{si min}_{C-B}} = 9,12 \text{ °C}$$

$$f_{\text{Rsi}} = 0,637$$

$$\theta_{\text{si min}_{A-B}} = 7,77 \text{ °C}$$

$$f_{\text{Rsi}} = 0,592$$

Recommended
for climate zone



arctic



cold



cool,
temperate



warm,
temperate



warm

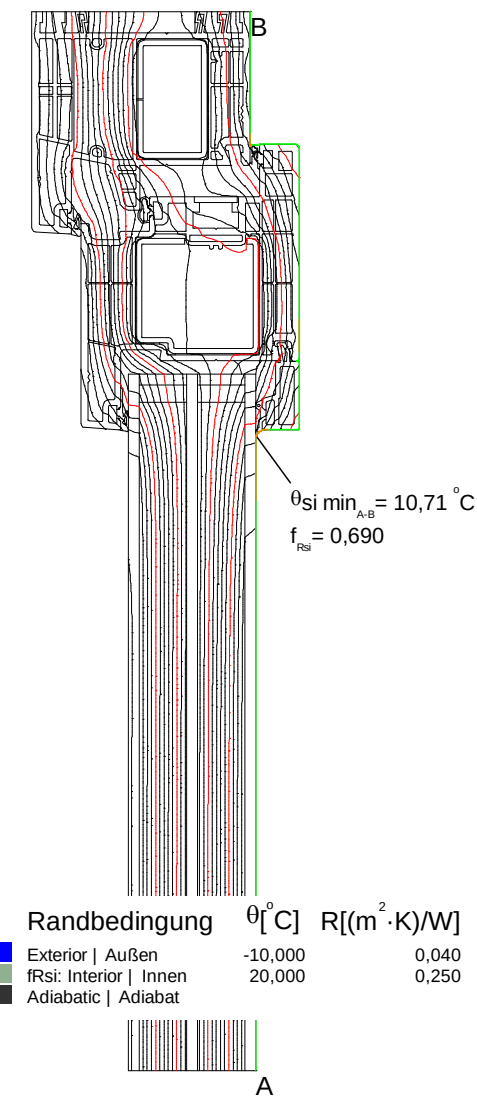
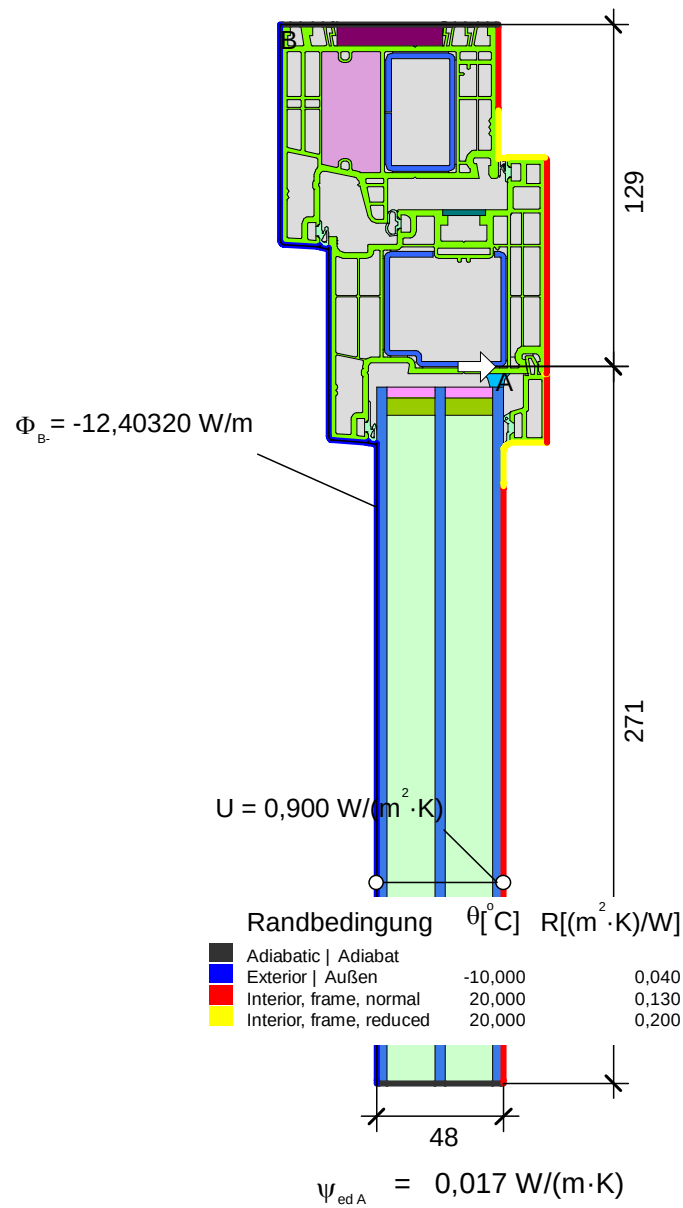
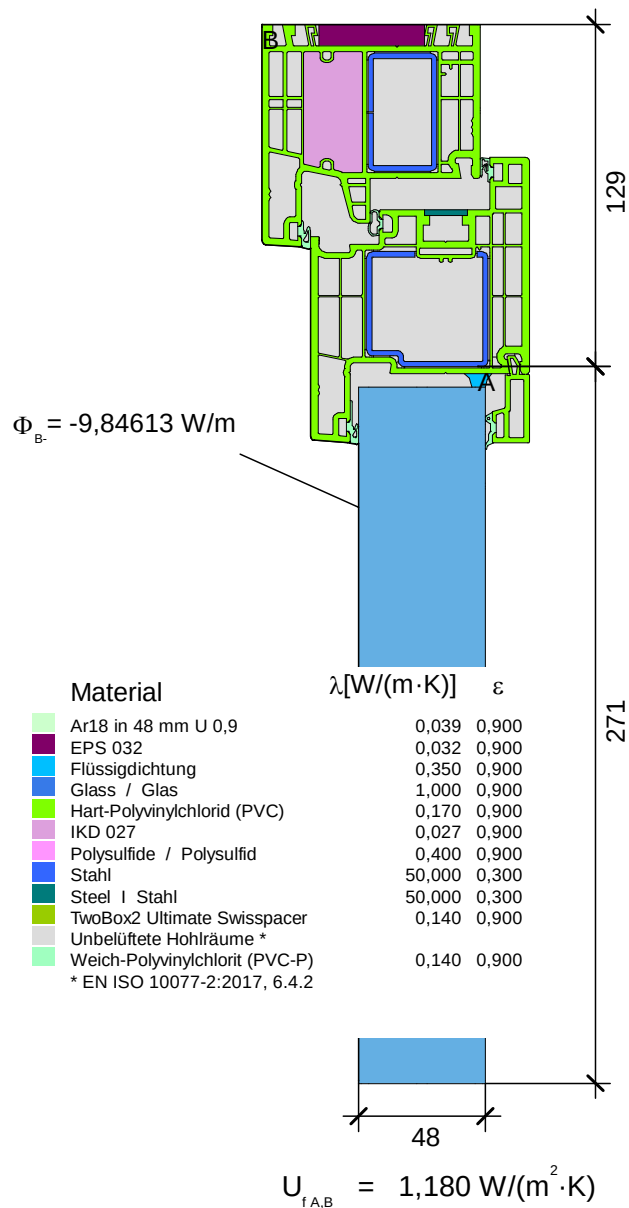


hot



very hot





Recommended
for climate zone



arctic



cold



cool,
temperate



warm,
temperate



warm

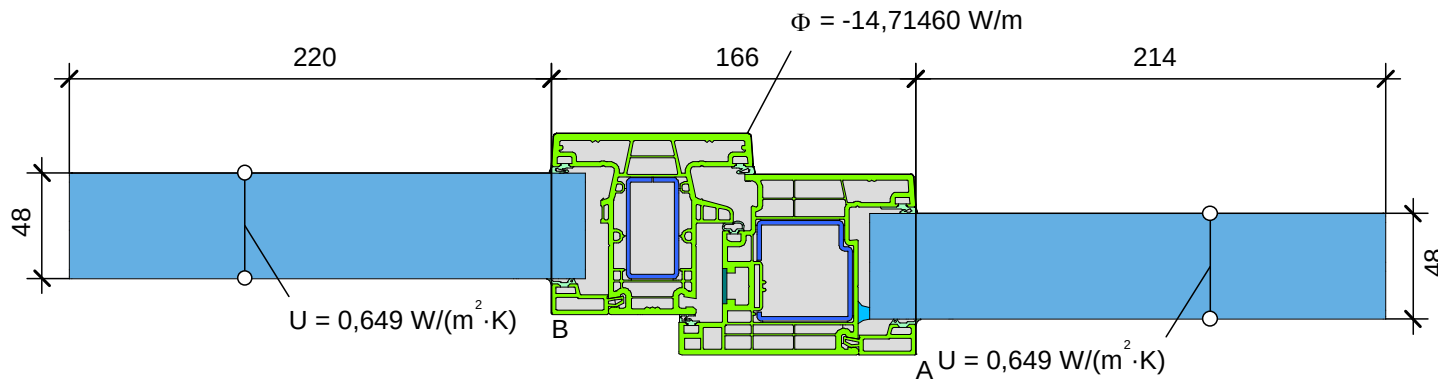


hot



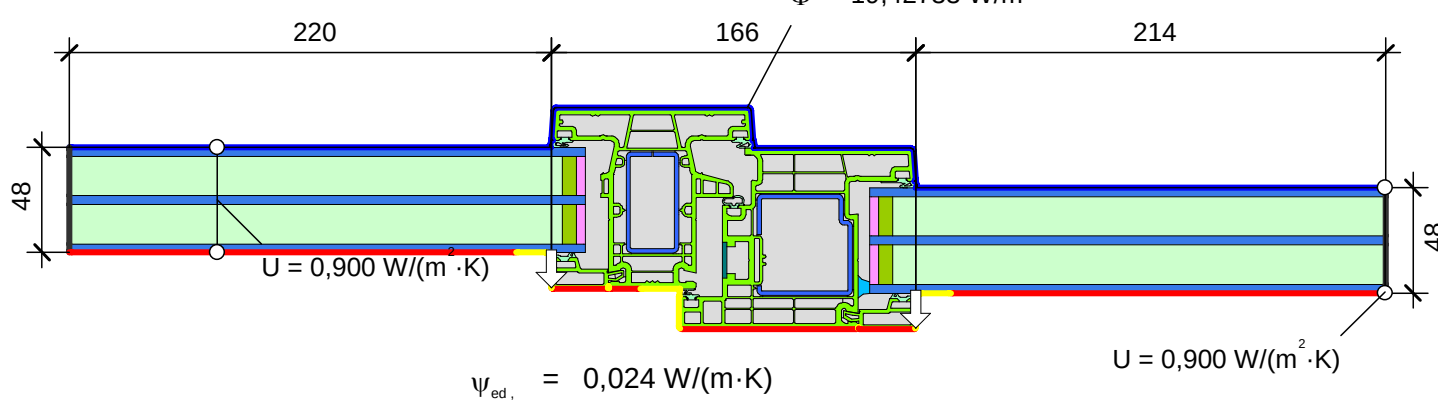
very hot



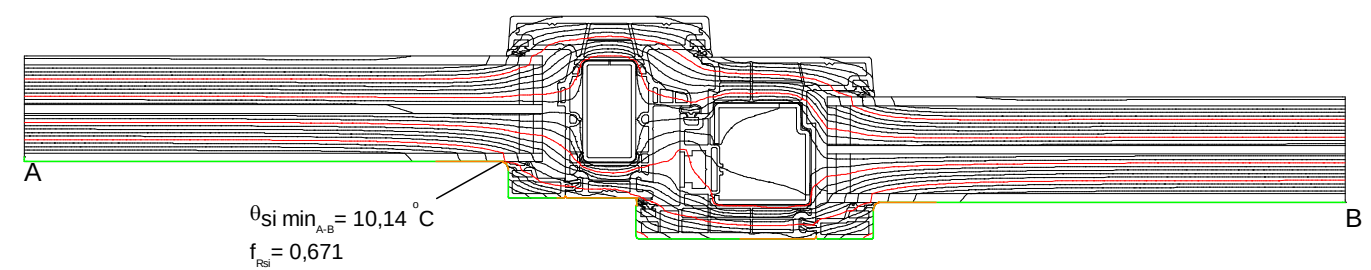


Material	$\lambda[\text{W/(m} \cdot \text{K)}]$	ε
Ar18 in 48 mm U 0,9	0,039	0,900
Flüssigdichtung	0,350	0,900
Glass / Glas	1,000	0,900
Hart-Polyvinylchlorid (PVC) (1)	0,170	0,900
Polysulfide / Polysulfid	0,400	0,900
Stahl (1)	50,000	0,300
Steel Stahl	50,000	0,300
TwoBox2 Ultimate Swisspacer	0,140	0,900
Unbelüftete Hohlräume (1) *		
Weich-Polyvinylchlorit (PVC-P) (1)	0,140	0,900

* EN ISO 10077-2:2017, 6.4.2



Randbedingung	$\theta[^\circ\text{C}]$	$R[(\text{m}^2 \cdot \text{K})/\text{W}]$
Adiabatic Adiabat		
Exterior Außen	-10,000	0,040
Interior, frame, normal	20,000	0,130
Interior, frame, reduced	20,000	0,200



Recommended
for climate zone

arctic

cold

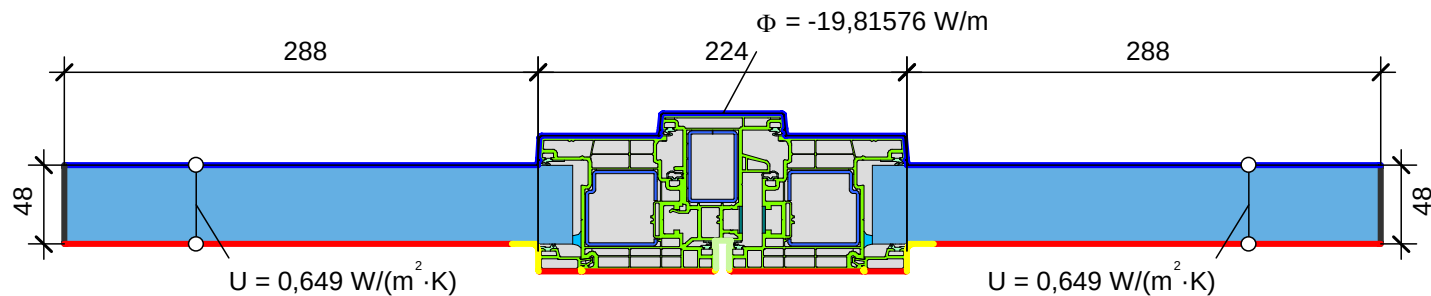
cool,
temperate

warm,
temperate

warm

hot

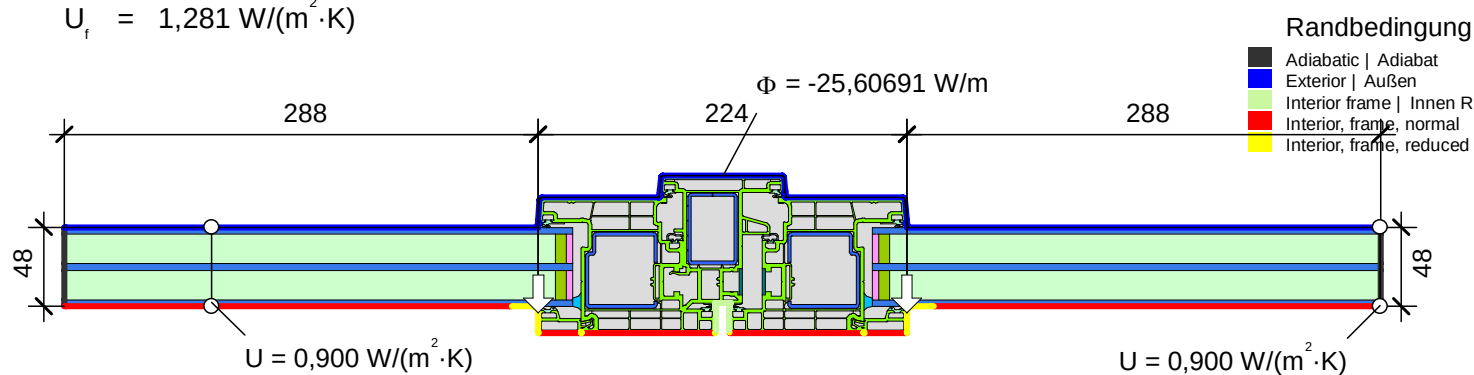
very hot



Material	$\lambda[\text{W/(m}\cdot\text{K)}]$	ε
Ar18 in 48 mm U 0,9	0,039	0,900
Flüssigdichtung	0,350	0,900
Glass / Glas	1,000	0,900
Hart-Polyvinylchlorid (PVC) (1)	0,170	0,900
Polysulfide / Polysulfid	0,400	0,900
Stahl (1)	50,000	0,300
Steel Stahl	50,000	0,300
TwoBox2 Ultimate Swisspacer	0,140	0,900
Unbelüftete Hohlräume (1) *		
Weich-Polyvinylchlorit (PVC-P) (1)	0,140	0,900

* EN ISO 10077-2:2017, 6.4.2

$$U_f = 1,281 \text{ W/(m}^2 \cdot \text{K)}$$



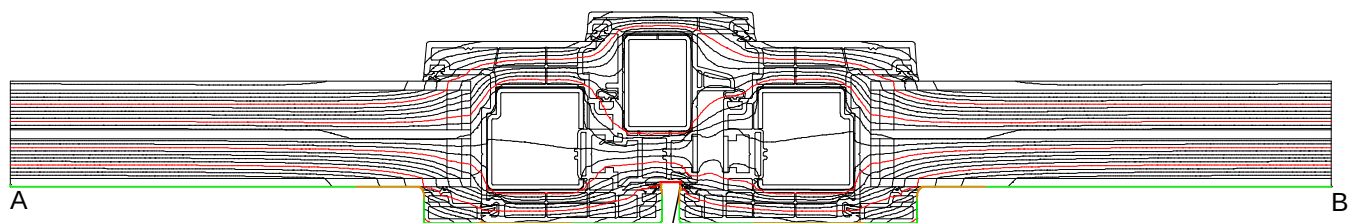
Randbedingung

Adiabatic Adiabat
Exterior Außen
Interior frame Innen Rahmen, Leicht belüftete Hohlräume
Interior, frame, normal
Interior, frame, reduced

$\theta[^\circ\text{C}]$ $R[(\text{m}^2 \cdot \text{K})/\text{W}]$

-10,000	0,040
20,000	0,300
20,000	0,130
20,000	0,200

$$\psi_{ed,} = 0,024 \text{ W/(m}\cdot\text{K)}$$



Recommended
for climate zone



arctic



cold



cool,
temperate



warm,
temperate



warm

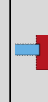


hot



very hot



frame values Rahmenwerte		Gealan		Bottom	Top	Side	Bottom fixed	Top fixed	Side fixed	Thres-hold	Side door	Flying mullion	Mullion	Mullion	Mullion fixed	Corner	Transom	Transom	Transom fixed
		Fenstertür		Unten	Oben	Seitl.	Unten fest	Oben fest	Seitl. fest	Schwelle	Seite Tür	Stulp	Pfosten	Pfosten	Pfosten fest	Ecke	Kämpfer	Kämpfer	Kämpfer fest
		Spacer Abstandhalter: SWISSPACER Ultimate																	
		Temperaturefactor Temperaturfaktor	f_{Rsi}=0,25m²k/W	0.59	0.69	0.69				0.59	0.69		0.61	0.67					
Frame width Rahmenbreite	b_f [mm]	118	158	158				118	158		224	166							
U-value frame Rahmen-U-Wert	U_f [W/(m²K)]	1.63	1.08	1.08				1.63	1.08		1.28	1.26							
Ψ-glass edge Glasrand-Ψ-Wert	Ψ_g [W/(mK)]	0.025	0.024	0.024				0.025	0.024		0.024	0.024							
U-value window Fenster-U-Wert	U_w [W/(m²K)] @ U _g = 0,90 W/(m²K)	1.053						Calculations based on reference width 1.10 m x height 2.20 m											
Ψ _{opaque} Ψ _{opak}	Ψ_{opaque} W/(mK)	0.220																	
Passive House effizienz class Passivhaus Effizienzklasse		phD																	

U-value IGU	U_g	[W/(m²K)]		0.70
U-value window	U_w			0.929
U-value IGU	U_g	[W/(m²K)]		0.64
U-value window	U_w			0.891
U-value IGU	U_g	[W/(m²K)]		0.58
U-value window	U_w			0.854

Recommended
for climate zone

