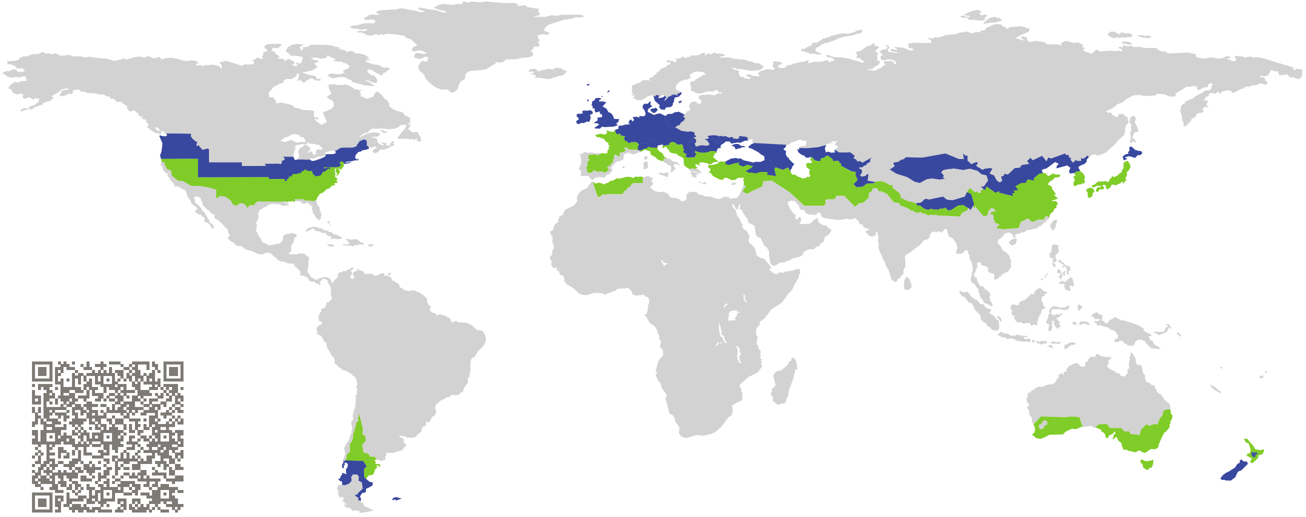
CERTIFICATE

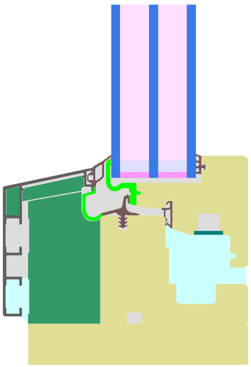
Certified Passive House Component

Component-ID 0962sl03 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category:	**Sliding Door**
Manufacturer:	**Beijing Milan Window Energy Saving Building Materials Co.,Ltd, BEIJING, China**
Product name:	**Milux Passive 135**



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

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

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

cool, temperate climate

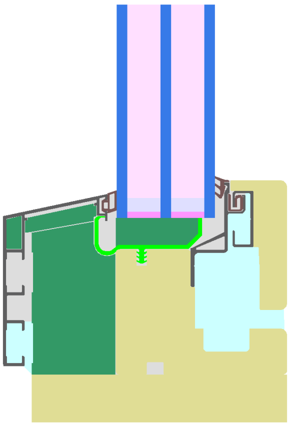
phA

CERTIFIED COMPONENT

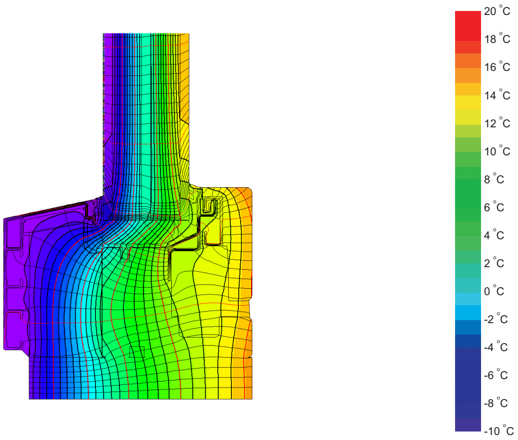
Passive House Institute

Passive House efficiency class phE phD phC phB phA

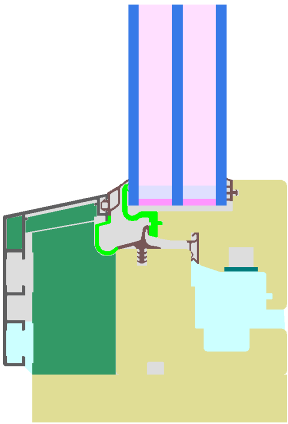
www.passivehouse.com



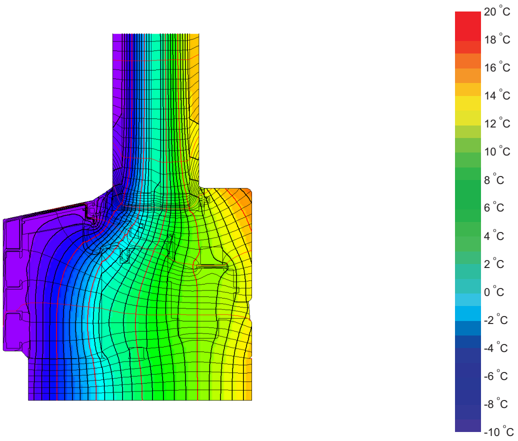
Calculation model



Isothermal



Calculation model



Isothermal

Description

Timber frame (0.13W/(mK)) with external aluminium shall and insulation PU (0.036W/(mK)). Used Pane: 47 mm (5/16/5/16/5).

Explanation

The window U-values were calculated for the test window size of 2.40 m × 2.50 m with U_g = 0.70 W/(m^2 K). If a higher quality glazing is used, the window U-values will improve as follows:

Glazing	U_g =	0.70	0.66	0.60	0.54	W/(m^2 K)
		↓	↓	↓	↓	
Window	U_W =	0.79	0.76	0.71	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.

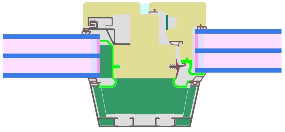
Further information relating to certification
can be found on www.passivehouse.com and passipedia.org.

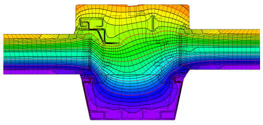
Frame values		Frame width b_f mm	U-value frame U_f W/(m^2 K)	Ψ-glazing edge Ψ_g W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Mullion 1 casement	(1M1)	133	0.90	0.028	0.71
Bottom fixed	(FB1)	116	0.84	0.028	0.71
Top fixed	(FH1)	93	0.78	0.029	0.71
Lateral fixed	(FJ1)	93	0.76	0.028	0.71
Top	(OH1)	93	0.88	0.029	0.71
Lateral	(OJ1)	93	0.82	0.028	0.71
Threshold	(OT2)	116	0.90	0.028	0.71

Spacer: SWISSPACER Ultimate Secondary seal: Polysulfide

Mullion
1 casement

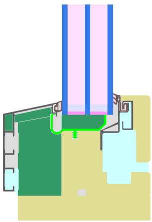
b_f = 133 mm
U_f = 0.90 W/(m^2 K)
Ψ_g = 0.028 W/(m K)
f_{Rsi} = 0.71

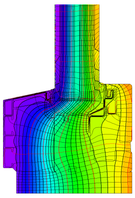




Bottom
fixed

b_f = 116 mm
U_f = 0.84 W/(m^2 K)
Ψ_g = 0.028 W/(m K)
f_{Rsi} = 0.71





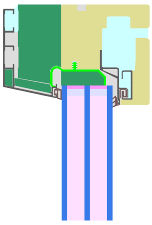
Top
fixed

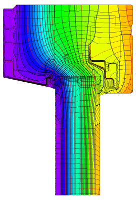
b_f = 93 mm

U_f = 0.78 W/(m^2 K)

Ψ_g = 0.029 W/(m K)

f_{Rsi} = 0.71





Lateral
fixed

b_f = 93 mm

U_f = 0.76 W/(m^2 K)

Ψ_g = 0.028 W/(m K)

f_{Rsi} = 0.71

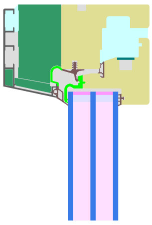
Top

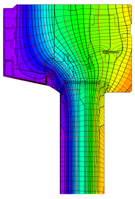
b_f = 93 mm

U_f = 0.88 W/(m^2 K)

Ψ_g = 0.029 W/(m K)

f_{Rsi} = 0.71





Lateral

b_f = 93 mm

U_f = 0.82 W/(m^2 K)

Ψ_g = 0.028 W/(m K)

f_{Rsi} = 0.71

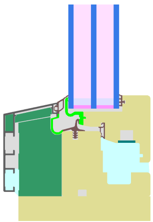
Threshold

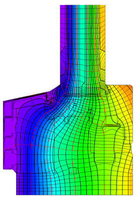
b_f = 116 mm

U_f = 0.90 W/(m^2 K)

Ψ_g = 0.028 W/(m K)

f_{Rsi} = 0.71

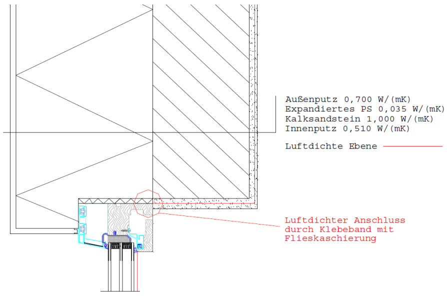




Validated installations

Exterior insulation and finishing system (EIFS) (fixed glazed)

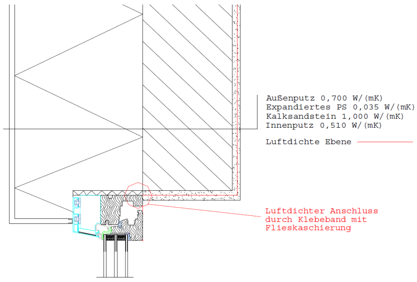
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.01$ W/(m K)

Exterior insulation and finishing system (EIFS) (operable)

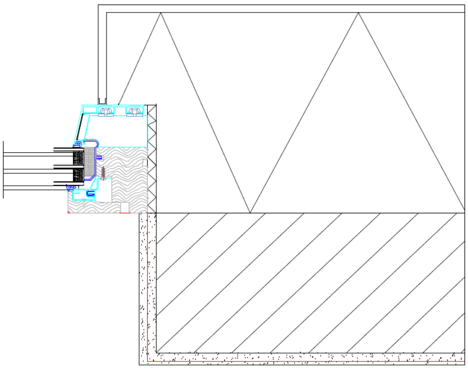
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.01$ W/(m K)

Exterior insulation and finishing s (EIFS) side (fixed glazed)

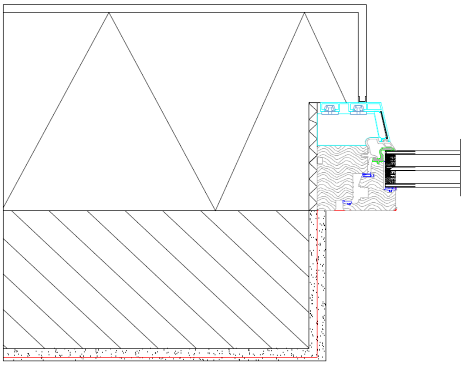
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.01$ W/(m K)

Exterior insulation and finishing system (EIFS) side (operable)

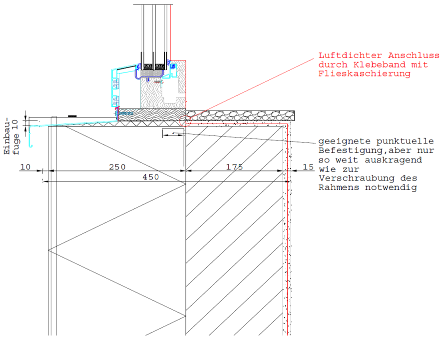
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.01$ W/(m K)

Exterior insulation and finishing system (EIFS) bottom (fixed)

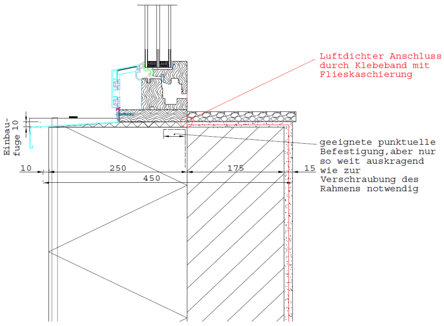
$U_1 = 0.13$ $U_2 = 0.14$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.01$ W/(m K)

Exterior insulation and finishing s. (EIFS) bottom (operable)

$U_1 = 0.13$ $U_2 = 0.14$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.01$ W/(m K)