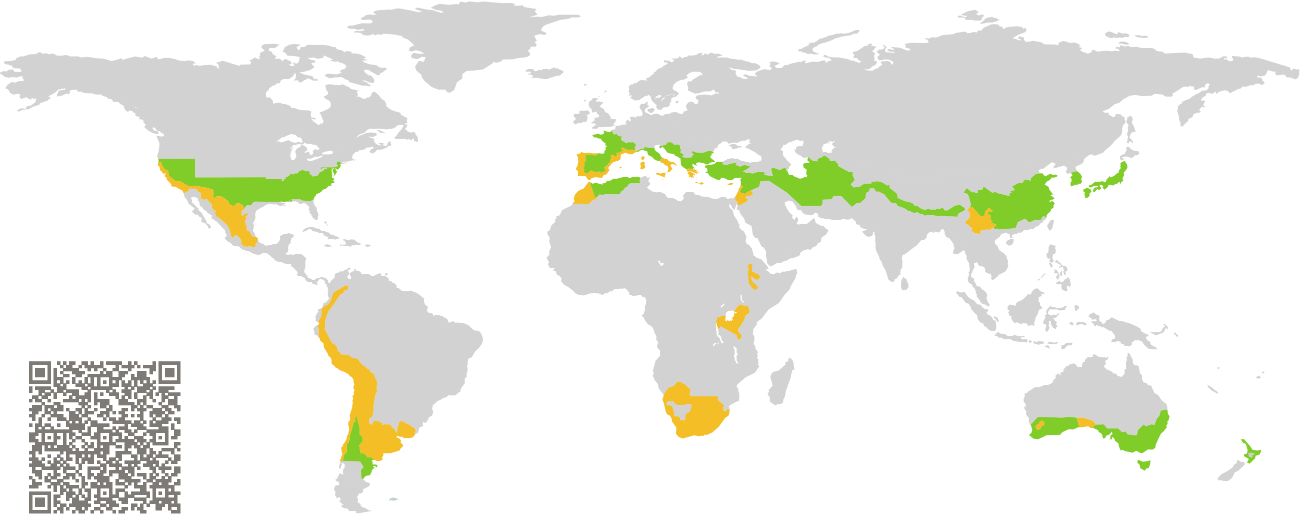
CERTIFICATE

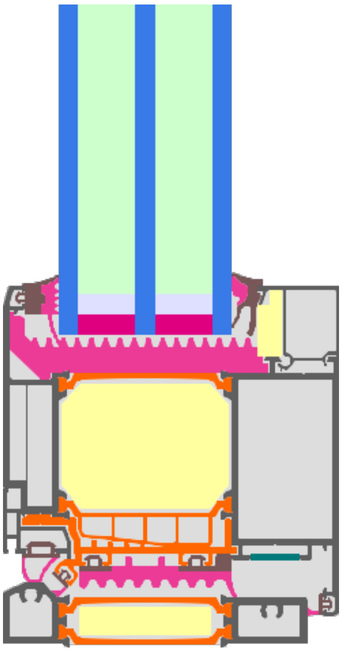
Certified Passive House Component

Component-ID 2378ed04 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category:	**Entry door**
Manufacturer:	**FOSHAN SANSHUI FENGLU ALUMINIUM COMPANY LIMITED** **Foshan** **China**
Product name:	**FG95MHI**



(Inward opening)

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

Comfort	$U_D = 0.94$	$\leq$	$1.00\,\mathrm{W/(m^2\,K)}$
	$U_{D,\mathrm{installed}}$	$\leq$	$1.05\,\mathrm{W/(m^2\,K)}$
	with U_g[1]	=	$0.90\,\mathrm{W/(m^2\,K)}$
Hygiene	$f_{Rsi=0.25}$	$\geq$	0.65

warm, temperate climate

CERTIFIED COMPONENT

Passive House Institute

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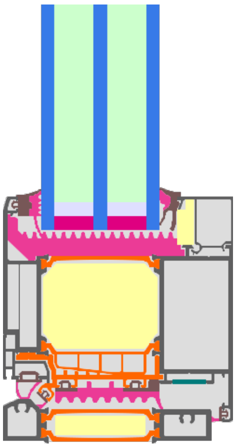
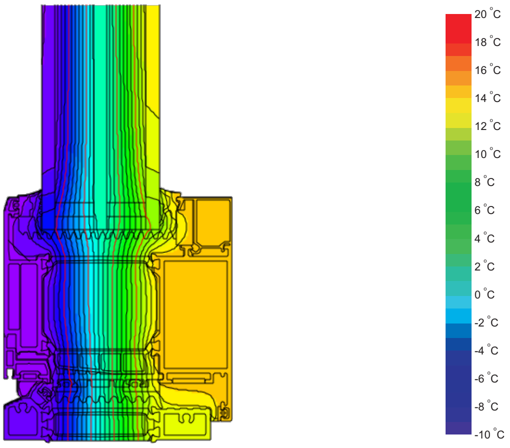
[1] Fully glazed door



Calculation model



Isothermal

Description

Aluminum frame with thermal separation (Technoform Low Lambda, 0,21 W/(mK)) and insulation (Kinspan Kooltherm, 0,022 W/(mK)). Pane thickness: 54 mm (6/18/6/18/6), rebate depth: 15 mm. As the door is fully glazed, airtightness testing is not deemed necessary for certification, however it may be required in other circumstances. An alternative Ug-value of 0,80 will give a Ud-value of 0,88 W/(m²K); a Ug-value of 0,70 will give a Ud-value of 0,81 W/(m²K); a Ug-value of 0,65 will give a Ud-value of 0,78 W/(m²K).

Explanation

The U-values of the door apply to a door 1.10 m wide by 2.20 m tall.

A detailed report of the calculations performed in the context of certification is available from the manufacturer.
Unless stated otherwise, the air tightness was determined according to EN 1026 with respect to the joint length under climate load in conjunction with EN 1121 for the closed, non-locked door. The result corresponds at least to air-tightness class 3 according to EN 12207.
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.

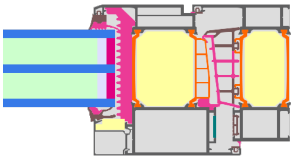
Further information relating to certification
can be found on www.passivehouse.com and passipedia.org.

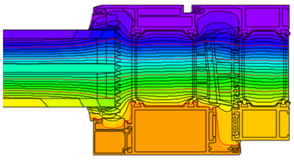
Frame values	Frame width b_f mm	*U*-value frame U_f W/(m^2 K)	Ψ edge Ψ_g W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Door hinge side (DJ1)	137	0.79	0.032	0.73
Door lock side (DL1)	137	0.79	0.032	0.73
Top (OH1)	137	0.79	0.032	0.73
Threshold (OT2)	112	0.94	0.032	0.72

Spacer: Technoform-Spacer SP16 Secondary seal: Silicone

Door
hinge side

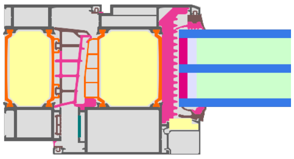
b_f = 137 mm
U_f = 0.79 W/(m^2 K)
Ψ_g = 0.032 W/(m K)
f_{Rsi} = 0.73

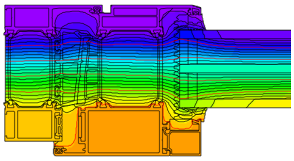




Door
lock side

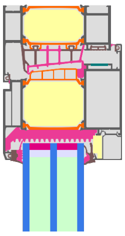
b_f = 137 mm
U_f = 0.79 W/(m^2 K)
Ψ_g = 0.032 W/(m K)
f_{Rsi} = 0.73

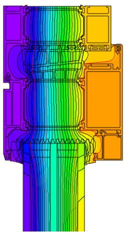




Top

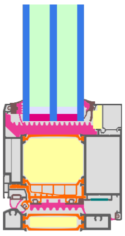
b_f = 137 mm
U_f = 0.79 W/(m^2 K)
Ψ_g = 0.032 W/(m K)
f_{Rsi} = 0.73

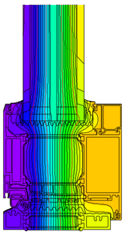




Threshold

b_f = 112 mm
U_f = 0.94 W/(m^2 K)
Ψ_g = 0.032 W/(m K)
f_{Rsi} = 0.72

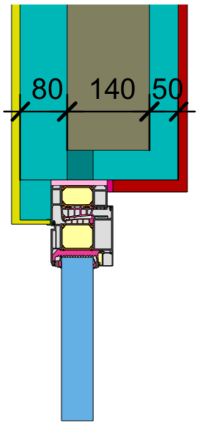




Validated installations

Formwork blocks top (operable)

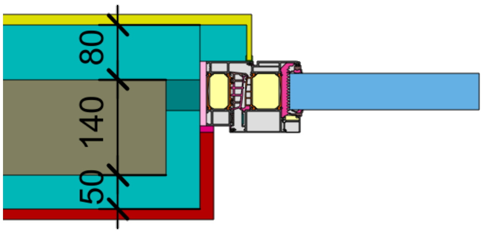
$U_1 = 0.25 \quad [\mathrm{W/(m^2\,K)}]$



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

Formwork blocks side (operable)

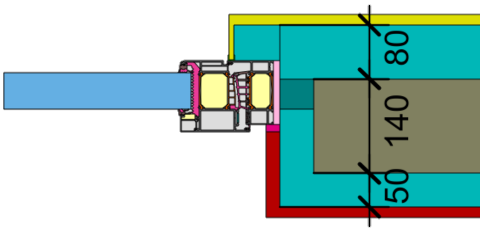
$U_1 = 0.25 \quad [\mathrm{W/(m^2\,K)}]$



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

Formwork blocks side (operable)

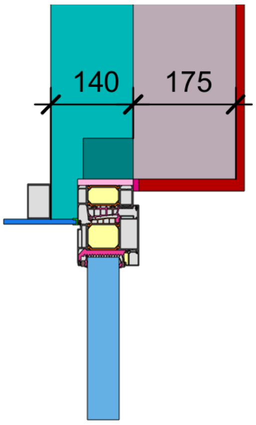
$U_1 = 0.25 \quad [\mathrm{W/(m^2\,K)}]$



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

Rain screen head (operable)

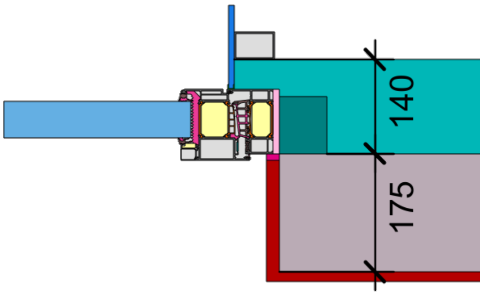
$U_1 = 0.22 \quad [\mathrm{W/(m^2\,K)}]$



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

Rain screen side (operable)

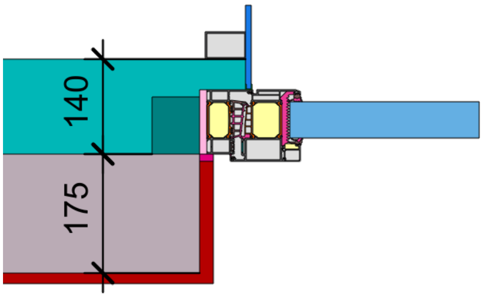
$U_1 = 0.22 \quad [\mathrm{W/(m^2\,K)}]$



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

Rain screen side (operable)

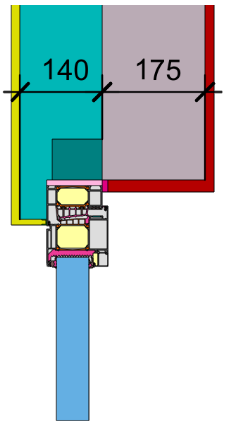
$U_1 = 0.22 \quad [\mathrm{W/(m^2\,K)}]$



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

Exterior insulation and finishing s (EIFS) top (operable)

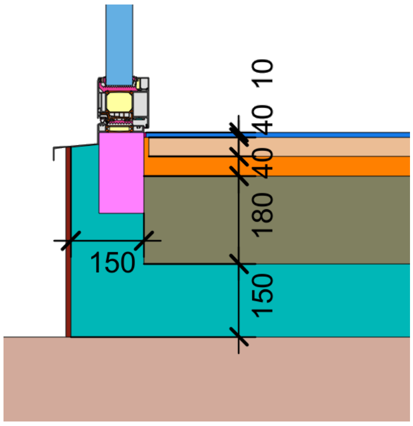
$U_1 = 0.23$ [W/(m^2 K)]



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

Ext. ins. a. finish. s. (EIFS) threshold floor slab (operable)

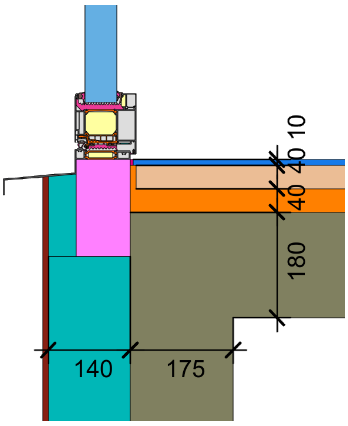
$U_1 = 0.21$ $U_2 = 0.18$ [W/(m^2 K)]



$\Psi_{install} = 0.04$ W/(m K)

Ext insulation a. finish. s. (EIFS) threshold ceiling (operable)

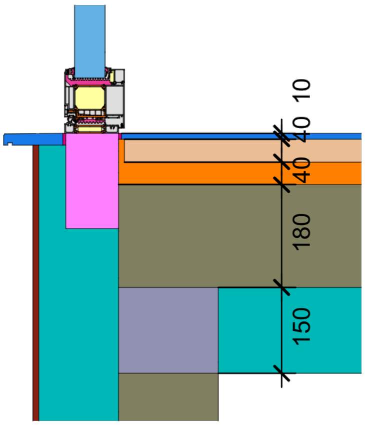
$U_1 = 0.24$ [W/(m^2 K)]



$\Psi_{install} = 0.06$ W/(m K)

Exterior insulation and finishing s (EIFS) threshold (operable)

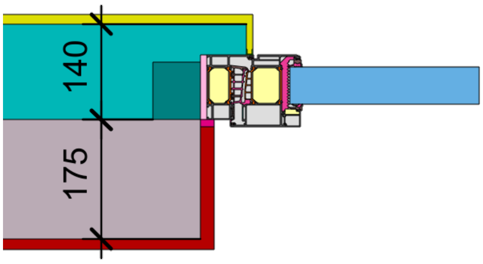
$U_1 = 0.23$ $U_2 = 0.17$ [W/(m^2 K)]



$\Psi_{install} = 0.02$ W/(m K)

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

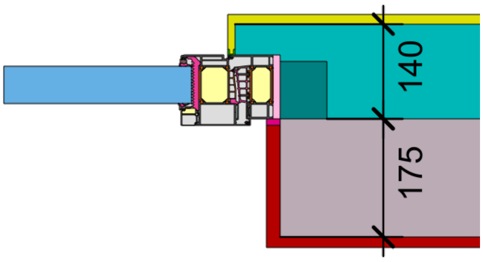
$U_1 = 0.23$ [W/(m^2 K)]



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

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

$U_1 = 0.23$ [W/(m^2 K)]



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