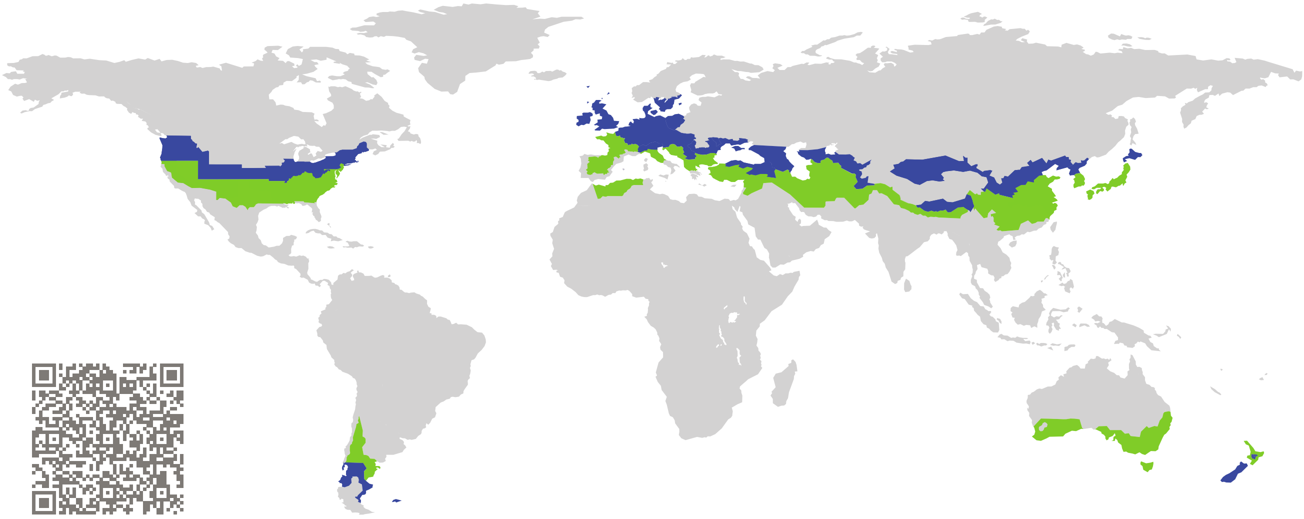
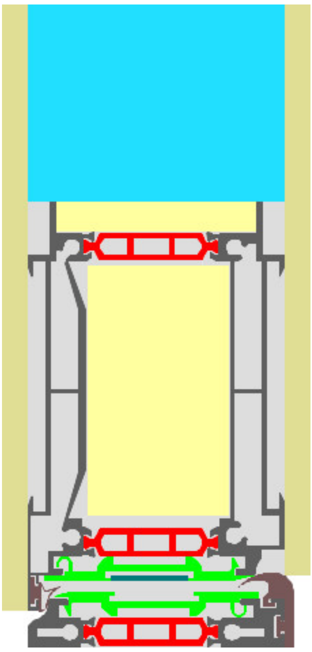
CERTIFICATE

Certified Passive House Component

Component-ID 1606ed03 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany





(Outward open)

Category:	**Entry door(opaque)**
Manufacturer:	**Zhejiang Huawei Door Co., Ltd.** **Lishui** **China**
Product name:	**Huawei 0311 Door**

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

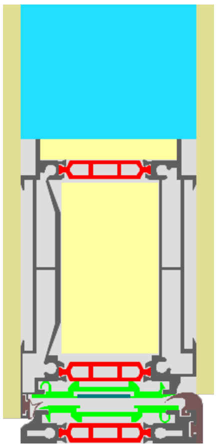
Comfort	$U_D = 0.63$	$\leq$	$0.80\,\mathrm{W/(m^2\,K)}$
	$U_{D,\text{installed}}$	$\leq$	$0.85\,\mathrm{W/(m^2\,K)}$
	with $U_{\text{door leaf}}$[1]	$=$	$0.31\,\mathrm{W/(m^2\,K)}$
Hygiene	$f_{Rsi=0.25}$	$\geq$	0.70
Airtightness	$Q_{100} = 1.21$	$\leq$	$2.25\,\mathrm{m^3/(h\,m)}$

[1] U-value of the insulated area of door leaf

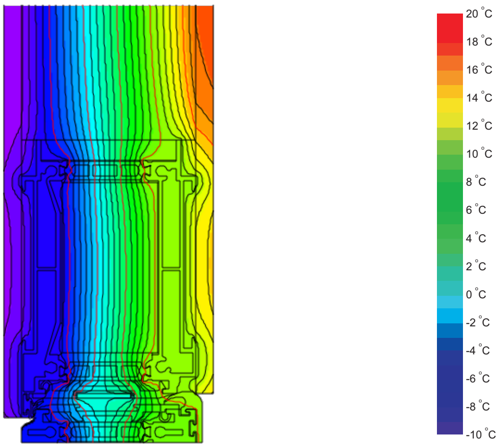
cool, temperate climate

CERTIFIED COMPONENT

Passive House Institute



Calculation model



Isothermal

Description

Aluminium frame, thermally separated with polyamide profiles (25% glass fibre, 0,30 W/(mK)) and insulated with Kingspan Kooltherm phenolic foam (0,021/0,022 W/(mK)). Opaque door panel from softwood, insulated with polyurethane foam (0,027 W/(mK)). The required temperature factor is not met at the threshold.

Explanation

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

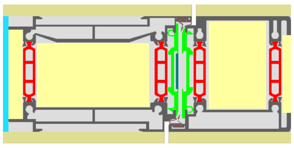
A detailed report of the calculations performed in the context of certification is available from the manufacturer.
Unless stated otherwise, the air tightness was determined according to EN 1026 with respect to the joint length under climate load in conjunction with EN 1121 for the closed, non-locked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

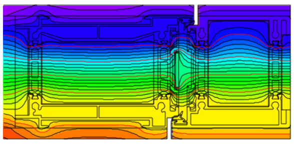
Further information relating to certification
can be found on www.passivehouse.com and passipedia.org.

Frame values	Frame width b_f mm	*U*-value frame U_f W/(m² K)	Ψ edge Ψ_g W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Door hinge side (DJ1)	197	1.03	–0.005	0.72
Door lock side (DL1)	197	1.03	–0.005	0.72
Top (OH1)	197	1.03	–0.005	0.72
Threshold (OT2)	139	1.10	0.000	0.68
	Spacer:	Secondary seal:		

Door
hinge side

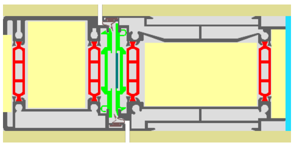
b_f = 197 mm
U_f = 1.03 W/(m² K)
Ψ_g = –0.005 W/(m K)
f_{Rsi} = 0.72

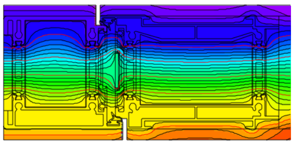




Door
lock side

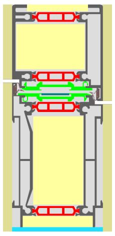
b_f = 197 mm
U_f = 1.03 W/(m² K)
Ψ_g = –0.005 W/(m K)
f_{Rsi} = 0.72

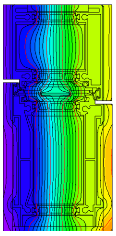




Top

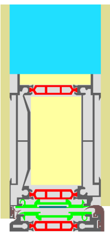
b_f = 197 mm
U_f = 1.03 W/(m² K)
Ψ_g = –0.005 W/(m K)
f_{Rsi} = 0.72

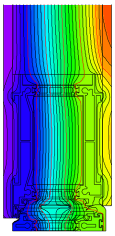




Threshold

b_f = 139 mm
U_f = 1.10 W/(m² K)
Ψ_g = 0.000 W/(m K)
f_{Rsi} = 0.68

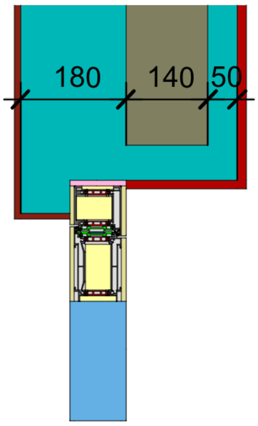




Validated installations

Formwork blocks top (operable)

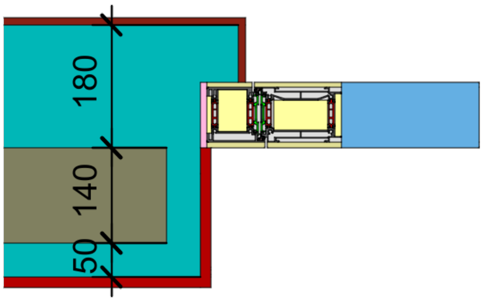
$U_1 = 0.15$ [W/(m^2 K)]



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

Formwork blocks side (operable)

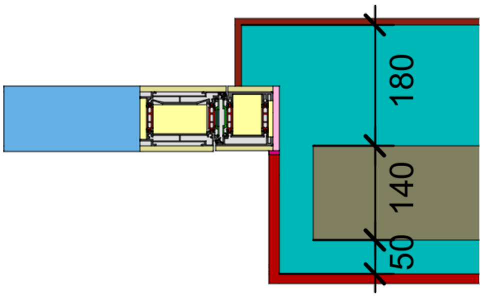
$U_1 = 0.15$ [W/(m^2 K)]



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

Formwork blocks side (operable)

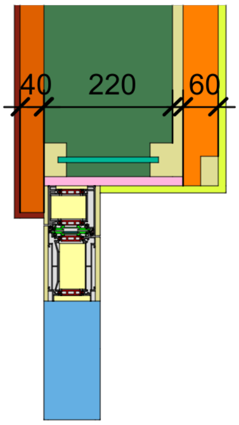
$U_1 = 0.15$ [W/(m^2 K)]



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

Lighthweight timber top (operable)

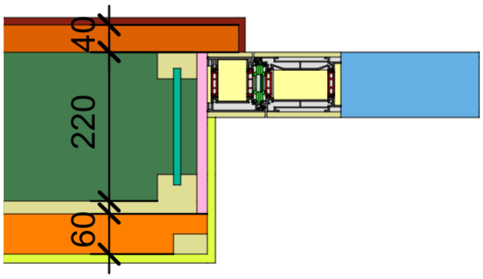
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.03$ W/(m K)

Lighthweight timber side (operable)

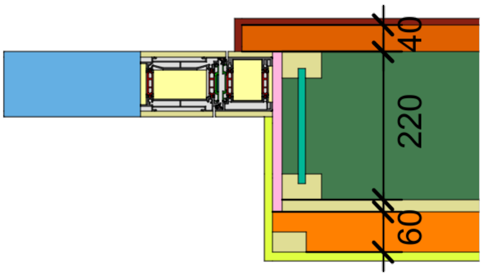
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.03$ W/(m K)

Lighthweight timber side (operable)

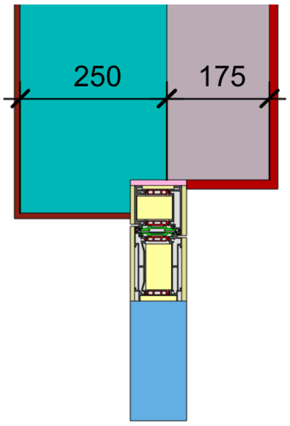
$U_1 = 0.13$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.03$ W/(m K)

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

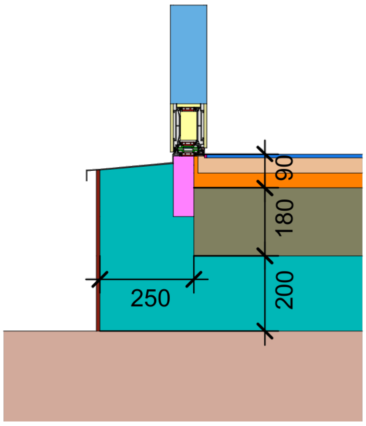
U_1 = 0.13 [W/(m^2 K)]



Ψ_{install} = 0.03 W/(m K)

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

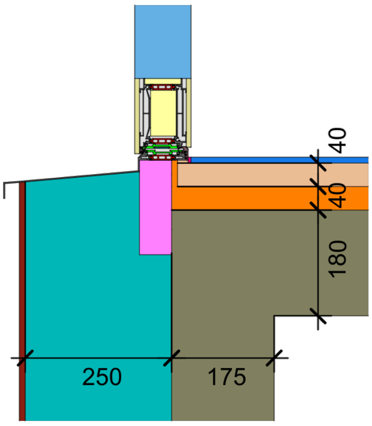
U_1 = 0.13 U_2 = 0.14 [W/(m^2 K)]



Ψ_{install} = 0.07 W/(m K)

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

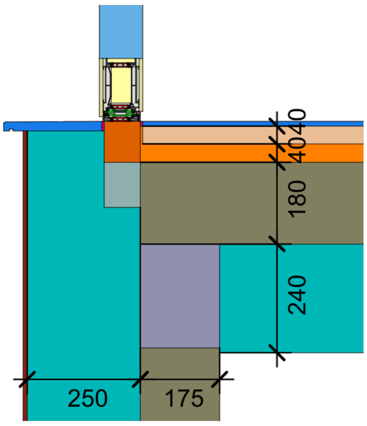
U_1 = 0.14 [W/(m^2 K)]



Ψ_{install} = 0.10 W/(m K)

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

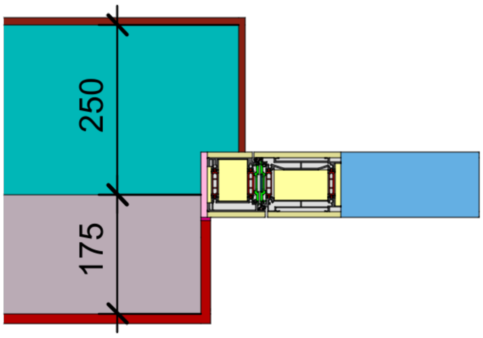
U_1 = 0.12 U_2 = 0.13 [W/(m^2 K)]



Ψ_{install} = 0.04 W/(m K)

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

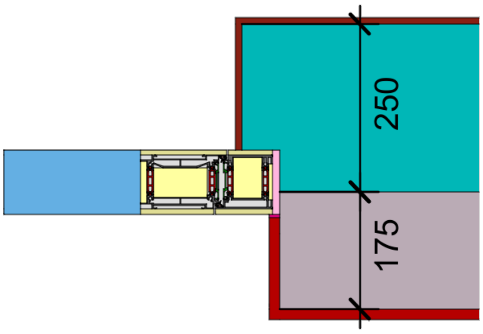
U_1 = 0.13 [W/(m^2 K)]



Ψ_{install} = 0.03 W/(m K)

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

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



Ψ_{install} = 0.03 W/(m K)

www.passivehouse.com