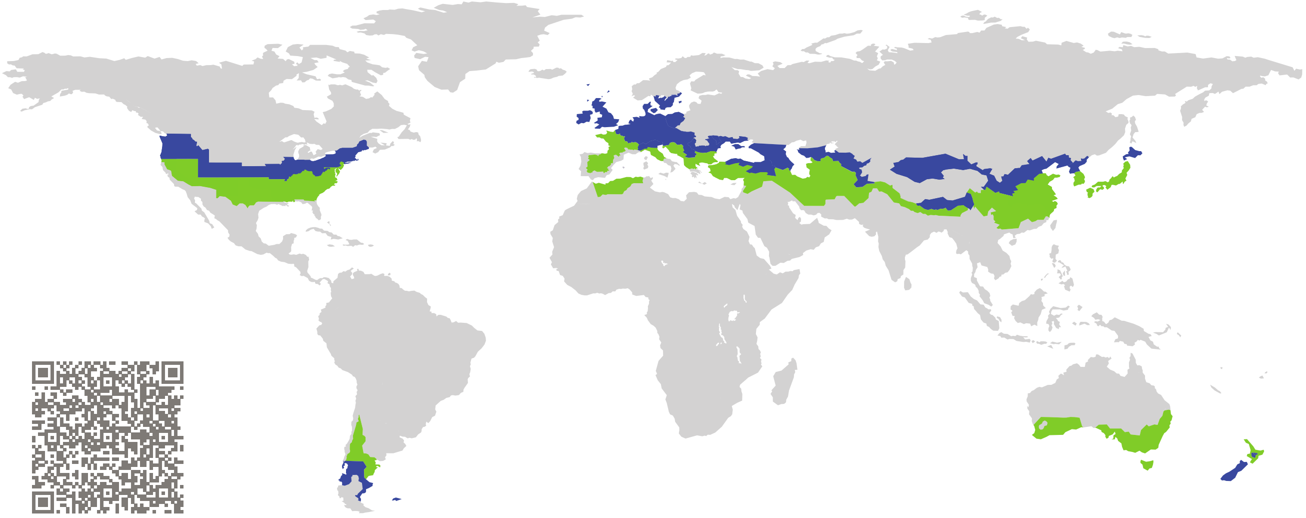
CERTIFICATE

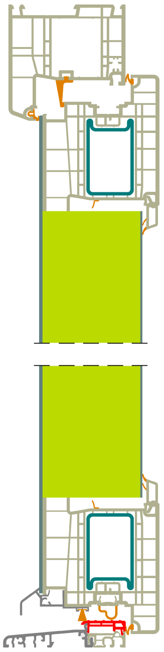
Certified Passive House Component

Component-ID 0189ed03 valid until 31st December 2026

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category:	**Entry door(with glas section)**
Manufacturer:	**Rehau Industries SE & Co. KG** **Rehau** **Germany**
Product name:	**Haustür GENEO PHZ, mit Füllung Rodenberg einseitig flügelüberdeckend**



(Inward opening)

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

Comfort	U_D= 0.68	$\leq$	0.80 W/(m^2 K)
	$U_{D,\mathrm{installed}}$	$\leq$	0.85 W/(m^2 K)
	with $U_{\mathrm{door\ leaf}}$[1]	=	0.39 W/(m^2 K)
Hygiene	$f_{Rsi=0.25}$	$\geq$	0.70

cool, temperate climate

CERTIFIED COMPONENT

Passive House Institute

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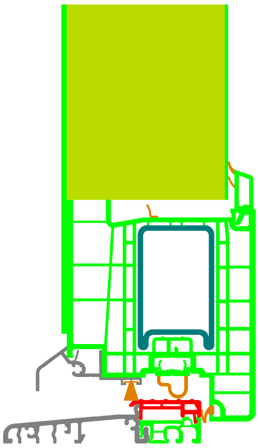
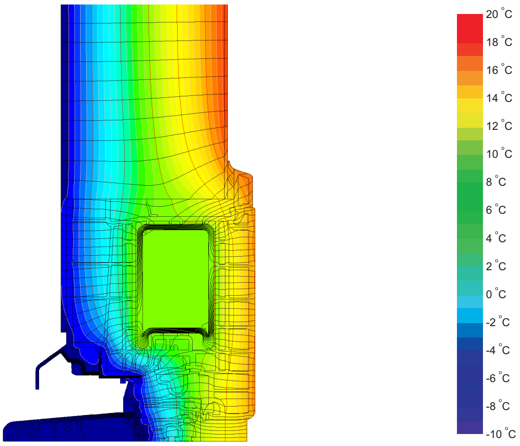
[1] U-value of the insulated area of door leaf



Calculation model



Isothermal

Description

Door frame made of PVC profiles; partially with reinforcing steel profiles; Door leaf (thickness 76 mm) covered by PVC panels on both sides; door leaf insulation (thickness 72 mm): PU-foam 0.030 W/(mK); threshold: thermally separated aluminum profile, the temperature factor requirement 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.

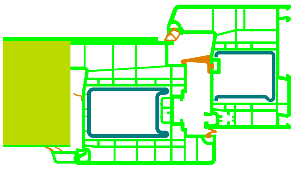
A detailed report of the calculations performed in the context of certification is available from the manufacturer.
Unless stated otherwise, the air tightness was determined according to EN 1026 with respect to the joint length under climate load in conjunction with EN 1121 for the closed, non-locked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

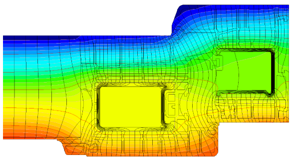
Further information relating to certification
can be found on www.passivehouse.com and passipedia.org.

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)	167	1.08	0.000	-
Door lock side	(DL1)	167	1.08	0.000	-
Head	(OH1)	167	1.08	0.000	-
Threshold	(OT2)	125	1.40	0.000	-
		Spacer:	Secondary seal:		

Door
hinge side

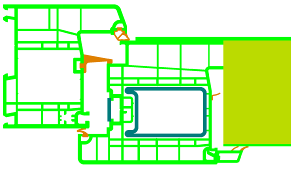
b_f = 167 mm
U_f = 1.08 W/(m² K)
Ψ_g = 0.000 W/(m K)
f_{Rsi} = -

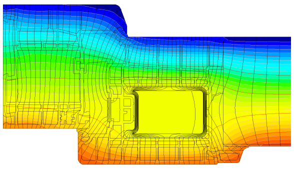




Door
lock side

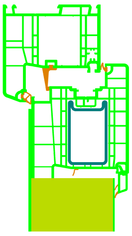
b_f = 167 mm
U_f = 1.08 W/(m² K)
Ψ_g = 0.000 W/(m K)
f_{Rsi} = -

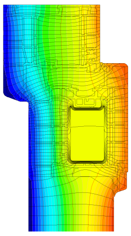




Head

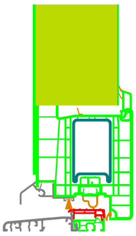
b_f = 167 mm
U_f = 1.08 W/(m² K)
Ψ_g = 0.000 W/(m K)
f_{Rsi} = -

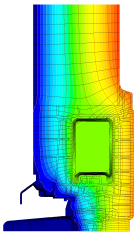




Threshold

b_f = 125 mm
U_f = 1.40 W/(m² K)
Ψ_g = 0.000 W/(m K)
f_{Rsi} = -

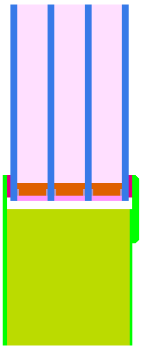


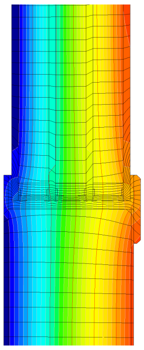


Door with glas section/infill

Glazing/Infill: 1

U_p= 0.50 W/(m^2 K)
Ψ = 0.040 W/(m K)
f_{Rsi} = -





Description:

Glazing (pane structure: 4*/18Ar/4/18Lu/4/18Ar/*4) with Ug = 0.50 W/(m²K) according to EN 673; Spacer: “Super Spacer TriSeal”

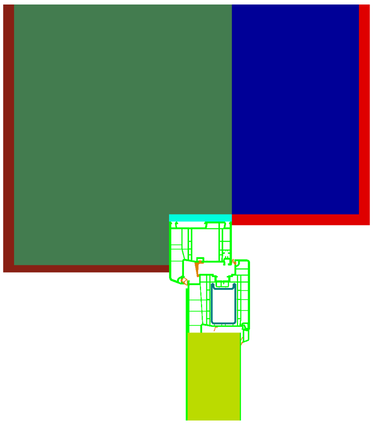
The comfort criterion limits the use of the infill element as follows:

Maximum area= 0.90 m^2
Maximum circumference= 4.40 m

Validated installations

Exterior insulation and finishing system (EIFS) (operable)

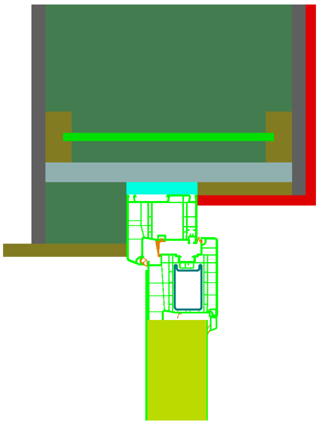
U_1 = 0.13 [W/(m^2 K)]



Ψ_{install} = –0.005 W/(m K)

Lightweight timber (operable)

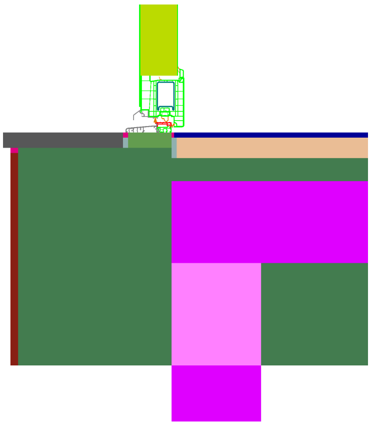
U_1 = 0.14 [W/(m^2 K)]



Ψ_{install} = –0.007 W/(m K)

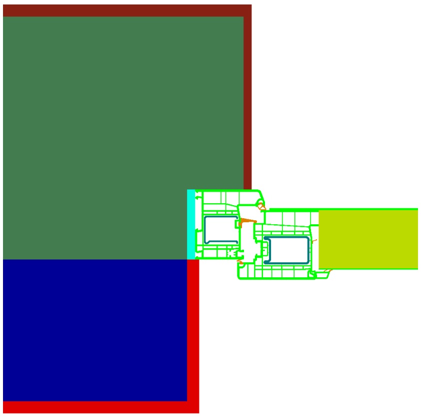
Threshold entrance door

$U_1 = 0.13$ $U_2 = 0.15$ [W/(m^2 K)]



$\Psi_{\text{install}} = 0.060$ W/(m K)

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



$\Psi_{\text{install}} = -0.005$ W/(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.