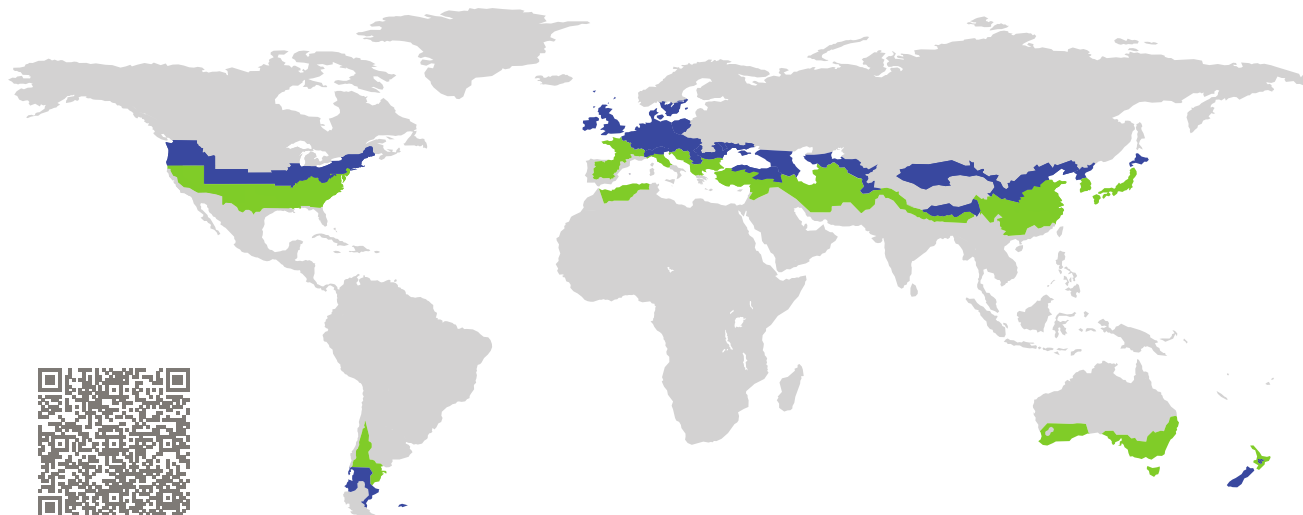


CERTIFICATE

Certified Passive House Component

Component-ID 2390cw03 valid until 31st December 2025

Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany

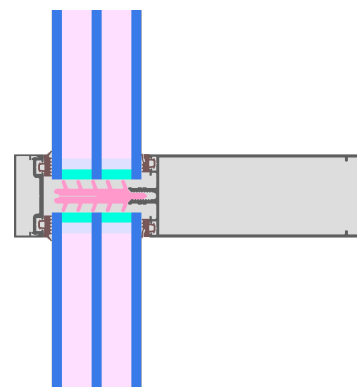


Category: **Curtain Wall**
Manufacturer: **Europa Profil SA,
Inofita, Viotia,
Greece**
Product name: **ECW50**

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

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

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



cool, temperate climate



**CERTIFIED
COMPONENT**

Passive House Institute

Passive House
efficiency class

phE

phD

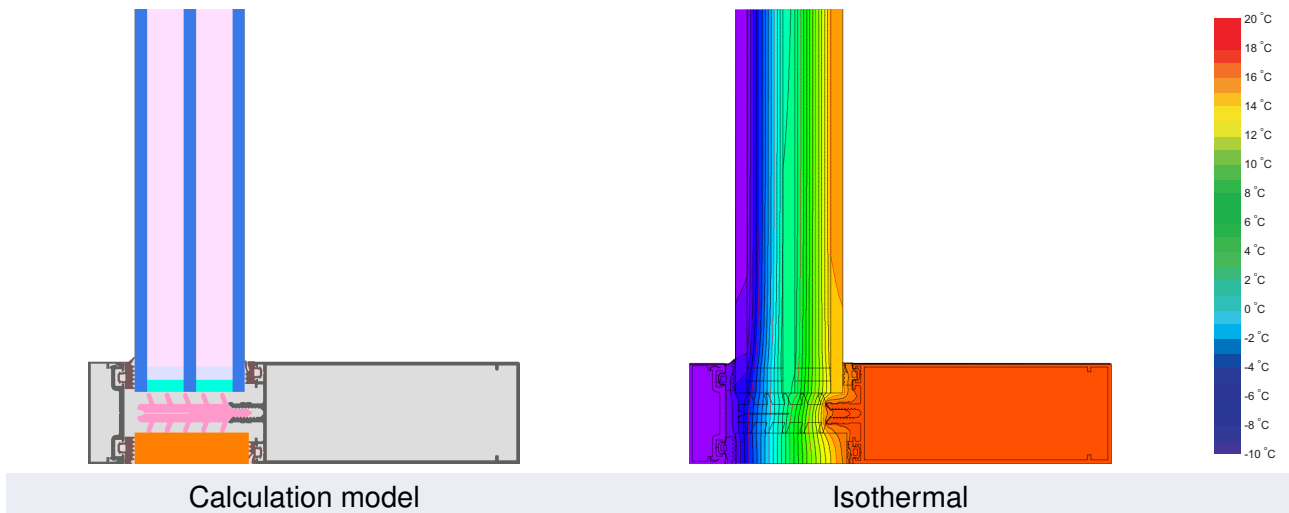
phC

phB

phA

phA+

www.passivehouse.com



Description

Aluminium curtain wall system 50 mm wide insulated with Nomatec XPET insulation (0,029 W/(mK)). Standard value of 0,030 W/(m²K) applied for pressure plate screws; standard value of 0,003 W/K applied for non-metallic glass carrier without screws. Edge bond: Swisspacer Ultimate with butyl secondary seal.

Explanation






The element U-values were calculated for the test element size of 1.20 m × 2.50 m with $U_g = 0.70 \text{ W}/(\text{m}^2 \text{ K})$. If a higher quality glazing is used, the element U-values will improve as follows:

Glazing	$U_g =$	0.70	0.64	0.58	0.52	W/(m² K)
		↓	↓	↓	↓	
Element	U_{CW}	0.80	0.74	0.69	0.63	W/(m² K)

Transparent building components are sorted 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.

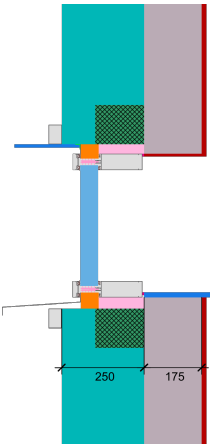
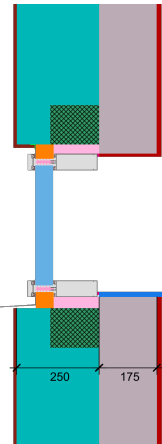
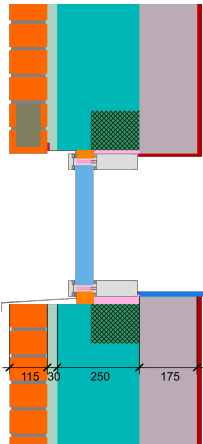
The Passive House Institute has defined international component criteria for seven climate zones. In principle, components that have been certified for climate zones with higher thermal requirements may also be used in climates with less stringent requirements. In a particular climate zone it may make 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 ¹ W/(m ² K)	Ψ -glazing edge Ψ_g W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Mullion fixed	(OM1) 	50	0.93	0.035	0.81
Transom fixed	(OT1) 	50	0.93	0.036	0.83
Bottom fixed	(FB1) 	50	0.94	0.035	0.82
Top fixed	(FH1) 	50	0.94	0.035	0.82
Lateral fixed	(FJ1) 	50	0.94	0.035	0.81
Spacer: SWISSPACER Ultimate			Secondary seal: Butyl		

Thermal glass carrier bridge² $\chi_{GT} = 0.003$ W/K

Validated installations

Ventilated facade (fixed glazed)		Exterior insulation and finishing system (EIFS) (fixed glazed)		Cavity wall (fixed glazing)	
$U_{Wall} = 0.13$ W/(m ² K)		$U_{Wall} = 0.13$ W/(m ² K)		$U_{Wall} = 0.13$ W/(m ² K)	
					
$\Psi_{install}$	W/(m K)	$\Psi_{install}$	W/(m K)	$\Psi_{install}$	W/(m K)
Top	0.024	Top	0.024	Top	0.021
Left	0.019	Left	0.019	Left	0.018
Right	0.019	Right	0.019	Right	0.018
Bottom	0.025	Bottom	0.025	Bottom	0.023
$U_{W,installed} = 0.83$ W/(m ² K)		$U_{W,installed} = 0.83$ W/(m ² K)		$U_{W,installed} = 0.83$ W/(m ² K)	

¹ Includes $\Delta U = 0.30$ W/(m² K). Standard value

² Standard value. Glass carrier type: Non-metallic

