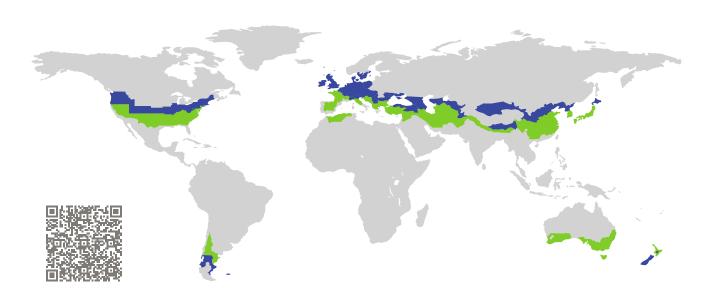
CERTIFICATE

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

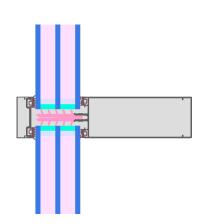
Product name: **ECW50**

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

Comfort $U_{CW} = 0.80 \le 0.80 \text{ W/(m}^2 \text{ K)}$

 $U_{CW,installed} \quad \leq \quad 0.85 \, W/(m^2 \, K)$ with $U_q = 0.70 \,\mathrm{W/(m^2 \,K)}$

≥ 0.70 Hygiene $f_{Rsi=0.25}$





phE

phD

ph**C**

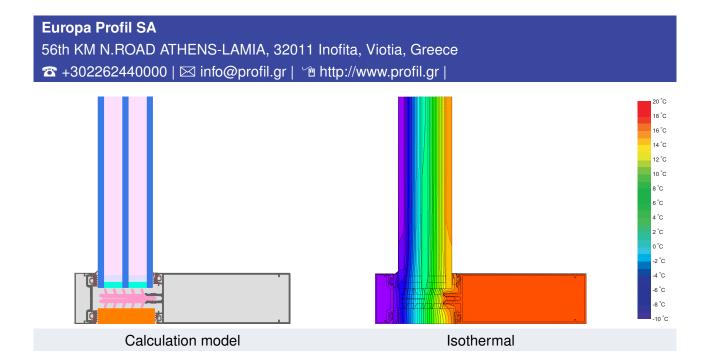
phB

ph**A**

phA+



cool, temperate climate



Description

Aluminium curtain wall system 50 mm wide insulated with Nomatec XPET insulation (0,029 W/(mK)). Standard value of 0,30 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 $1.20 \,\mathrm{m} \times 2.50 \,\mathrm{m}$ with $U_g = 0.70 \,\mathrm{W/(m^2 \, K)}$. If a higher quality glazing is used, the element U-values will improve as follows:

Glazing
$$U_g = \begin{bmatrix} 0.70 & 0.64 & 0.58 & 0.52 & W/(m^2 \text{ K}) \\ \downarrow & \downarrow & \downarrow & \downarrow \\ \text{Element } U_{CW} & 0.80 & 0.74 & 0.69 & 0.63 & W/(m^2 \text{ K}) \end{bmatrix}$$

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.

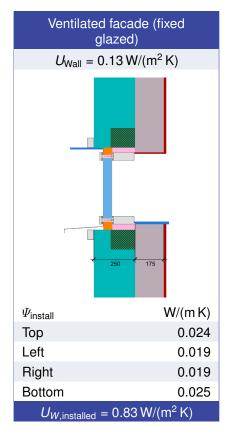
Further information relating to certification can be found on www.passivehouse.com and passipedia.org.

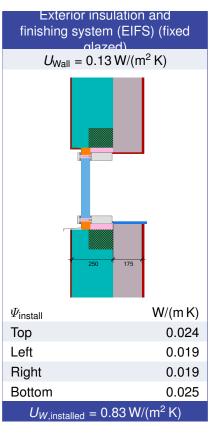
2/4 ECW50

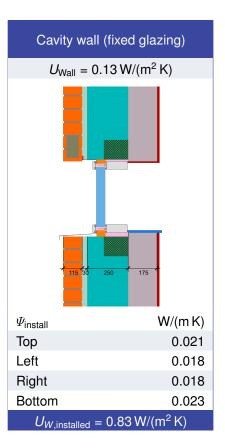
Frame values			Frame width <i>b_f</i> mm	U -value frame U_f^{-1} W/(m 2 K)	Ψ -glazing edge Ψ_g W/(m K)	Temp. Factor f _{Rsi=0.25} [-]
Mullion fixed	(0M1)	-	50	0.93	0.035	0.81
Transom fixed	(0T1)	•	50	0.93	0.036	0.83
Bottom fixed	(FB1)	1	50	0.94	0.035	0.82
Top fixed	(FH1)	T	50	0.94	0.035	0.82
Lateral fixed	(FJ1)		50	0.94	0.035	0.81
		Spacer:	SWISSPACER Ultim	ate Se	Secondary seal: Butyl	

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

Validated installations







 $^{^{1}}$ Includes $\Delta U = 0.30 \text{ W/(m}^{2} \text{ K)}$. Standard value

²Standard value. Glass carrier type: Non-metallic

