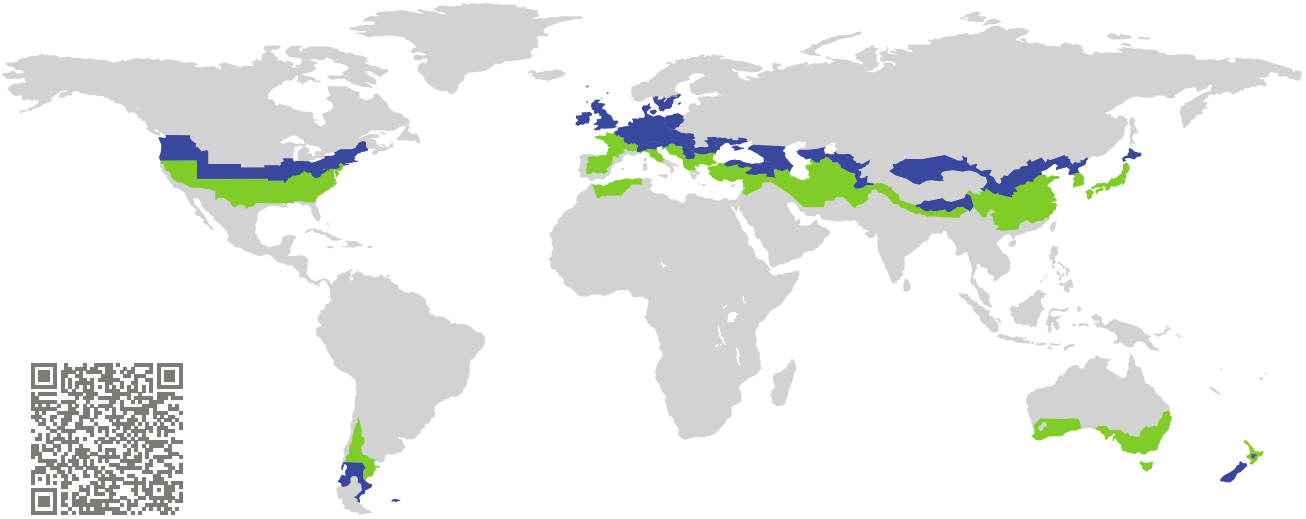
CERTIFICATE

Certified Passive House Component

Component-ID 2164sk03 valid until 31st December 2025

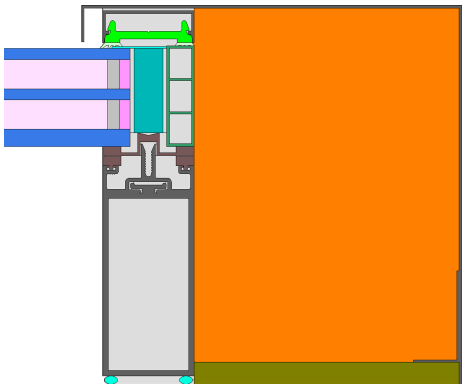
Passive House Institute
Dr. Wolfgang Feist
64283 Darmstadt
Germany



Category: **Skylight**

Manufacturer: **Whitesales, Livingston, United Kingdom**

Product name: **Monopitch PH**



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

Comfort	U_{SK} = 0.77	≤	1.10 W/(m² K)
	$U_{SK,installed}$	≤	1.10 W/(m² K)
	with U_g	=	0.80 W/(m² K)
Hygiene	$f_{Rsi=0.25}$	≥	0.70

cool, temperate climate

phC

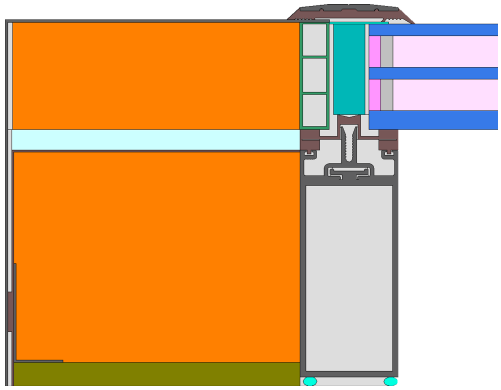
CERTIFIED COMPONENT

Passive House Institute

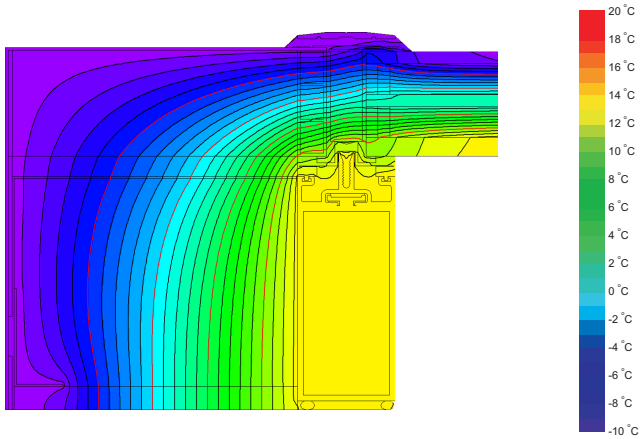
Passive House efficiency class	phE	phD	phC	phB	phA

www.passivehouse.com

Whitesales
Unit 1, 28 Firth Road Houston Industrial Estate, EH54 5DJ Livingston, United Kingdom
☎ 01506 448 140 | ✉ | http://www.whitesales.co.uk/ |



Calculation model



Isothermal

Description

Monopitch skylight with aluminium facing shell. Mineralwool insulation (0.04 W/(mK)) filling. Transoms insulated by EPS (0.035 W/(mK)). Contains surcharge of 0.02 W/m²K for pressure plate fasteners. Pane thickness: 53.5 mm (6/16/6/16/9.5), rebate depth: 15 mm. The U-values of the glass-splits (Transom and mullion) contain a 0.3 W/m²K surcharge for the screws. The certificate is also valid for smaller box heights.

Explanation

The window U-values were calculated for the test window size of 1.50 m × 1.50 m with U_g = 0.80 W/(m^2 K). If a higher quality glazing is used, the window U-values will improve as follows:

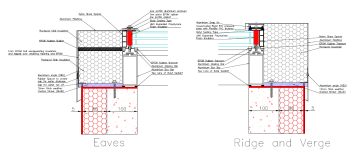
Glazing	U_g =	0.80	0.78	0.76	0.70	W/(m^2 K)
		↓	↓	↓	↓	
Window	U_W =	0.77	0.76	0.75	0.72	W/(m^2 K)

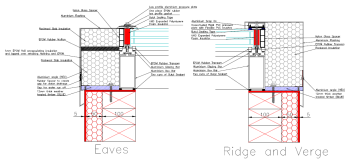
Transparent building components are classified into efficiency classes depending on the heat losses through the opaque part. The frame U-Values, frame widths, thermal bridges at the glazing edge, and the glazing edge lengths are included in these heat losses. A more detailed report of the calculations 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 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-glazing edge Ψ_g W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Mullion fixed	(0M1)	50	0.91	0.049	0.77
Transom fixed	(0T1)	50	0.95	0.055	0.76
Bottom	(OB1)	199	0.59	0.046	0.71
Top	(OH1)	208	0.55	0.044	0.73
Lateral	(OJ1)	208	0.55	0.044	0.73
Spacer: Super Spacer® TriSeal™ / T-Spacer™ SG				Secondary seal: Polysulfide	

Validated installations

Concrete roof	
U_{Wall} = 0.10 W/(m² K)	
	
$\Psi_{install}$	W/(m K)
Top	0.117
Left	0.117
Right	0.117
Bottom	0.119
$U_{W,installed}$ = 1.09 W/(m² K)	

Lightweight roof	
U_{Wall} = 0.09 W/(m² K)	
	
$\Psi_{install}$	W/(m K)
Top	0.123
Left	0.123
Right	0.123
Bottom	0.123
$U_{W,installed}$ = 1.10 W/(m² K)	