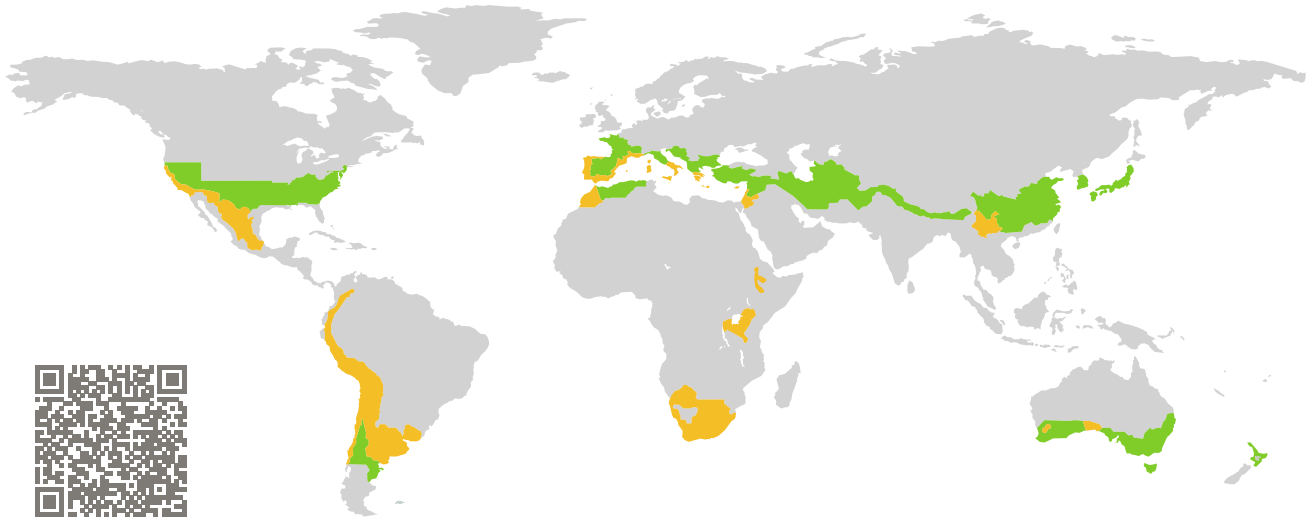


# CERTIFICATE

Certified Passive House Component

Component-ID 0939wi04 valid until 31st December 2016

Passive House Institute  
Dr. Wolfgang Feist  
64283 Darmstadt  
Germany

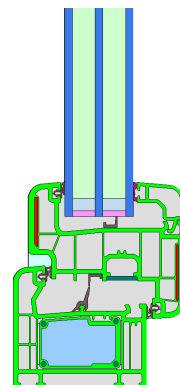


Category: **Window frame**  
Manufacturer: **Deceuninck N.V.,  
Borox (Toledo),  
Spain**  
Product name: **Zendow#neo Premium**

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

Comfort  $U_W = 1.00 \leq 1.00 \text{ W}/(\text{m}^2 \text{ K})$   
 $U_{W, \text{ installed}} \leq 1.05 \text{ W}/(\text{m}^2 \text{ K})$   
mit  $U_g = 0.90 \text{ W}/(\text{m}^2 \text{ K})$

Hygiene  $f_{Rsi=0.25} \geq 0.65$



Passive House  
efficiency class

phE

phD

phC

phB

phA

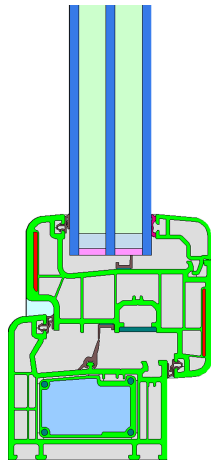
[www.passivehouse.com](http://www.passivehouse.com)

warm, temperate climate

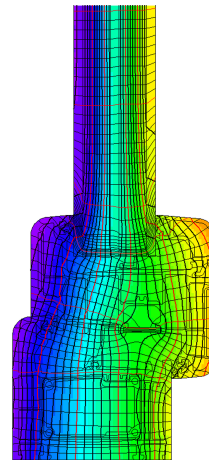


**CERTIFIED  
COMPONENT**

Passive House Institute



Calculation model



Isothermal

## Description

Construction: PVC-cavity-profile with glass-fibre reinforcements within the sash and steel-inlays within the PVC-foam filled blind-frame reinforcement. Pane thickness: 36 mm (4/12/4/12/4), rebate depth: 18 mm, spacer: SWISSPACER Ultimate

## Explanation





The window U-values were calculated for the test window size of 1.23 m × 1.48 m with  $U_g = 0.70 \text{ W}/(\text{m}^2 \text{ K})$ . If a higher quality glazing is used, the window U-values will improve as follows:

Glazing	$U_g =$	0.90	0.80	0.70	0.64	$\text{W}/(\text{m}^2 \text{ K})$
		↓	↓	↓	↓	
Window	$U_W =$	1.00	0.93	0.86	0.82	$\text{W}/(\text{m}^2 \text{ K})$

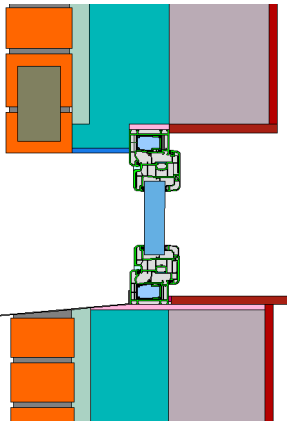
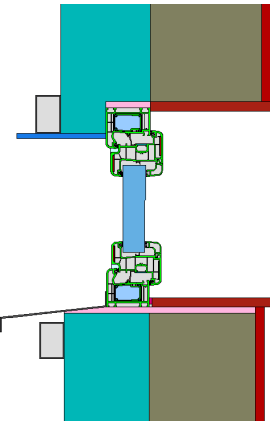
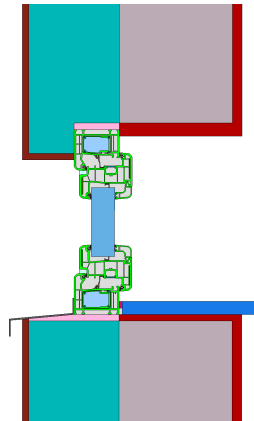
Transparent building components are classified into efficiency classes depending on the heat losses through the opaque part. The frame U-Values, frame widths, thermal bridges at the glazing edge, and the glazing edge lengths are included in these heat losses. A more detailed report of the calculations 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](http://www.passivehouse.com) and [passipedia.org](http://passipedia.org).

Frame values		Frame width $b_f$ mm	$U$ -value frame $U_f$ W/(m <sup>2</sup> K)	$\Psi$ -glass edge $\Psi_g$ W/(m K)	Temp. Factor $f_{Rsi=0.25}$ [-]
Top	(to) 	108	1.03	0.026	0.69
Side	(s) 	108	1.03	0.026	0.69
Bottom	(bo) 	108	1.03	0.026	0.69
Mullion 1 casement	(m1) 	148	0.94	0.027	0.68
Spacer: SWISSPACER Ultimate			Secondary seal: Polysulfide		

## Validated installations

Cavity wall		Ventilated facade		EIFS	
					
$\Psi_{\text{install}}$	W/(m K)	$\Psi_{\text{install}}$	W/(m K)	$\Psi_{\text{install}}$	W/(m K)
Top	0.001	Top	-0.003	Top	-0.002
Left	0.001	Left	-0.003	Left	-0.002
Right	0.001	Right	-0.003	Right	-0.002
Bottom	0.013	Bottom	0.013	Bottom	0.014
$U_{W,\text{installed}} = 1.01 \text{ W/(m}^2 \text{ K)}$		$U_{W,\text{installed}} = 1.01 \text{ W/(m}^2 \text{ K)}$		$U_{W,\text{installed}} = 1.01 \text{ W/(m}^2 \text{ K)}$	

