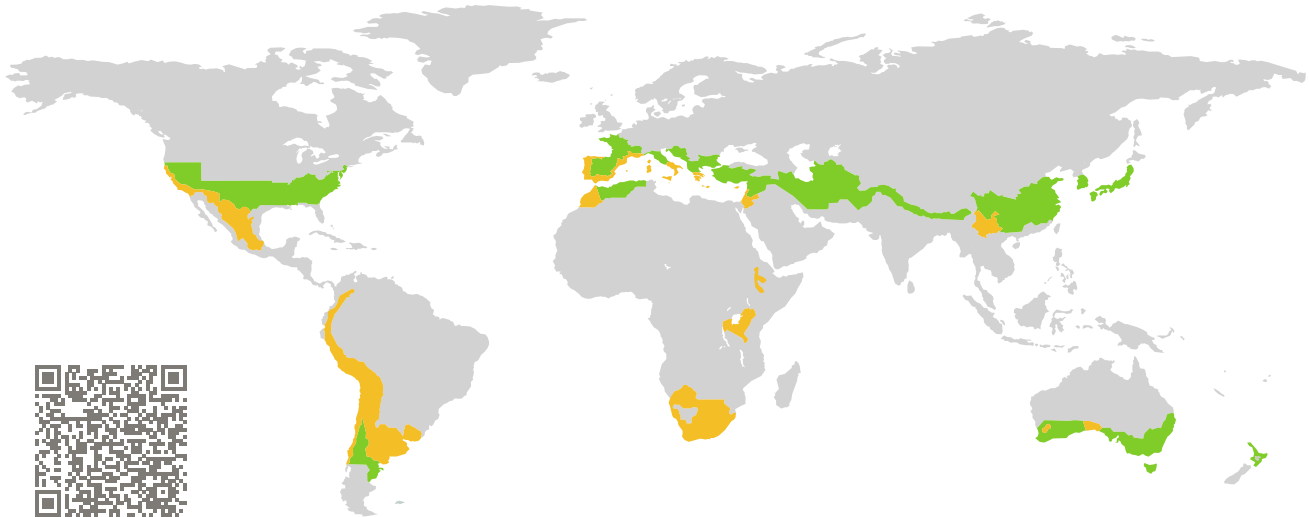


# CERTIFICATE

Certified Passive House Component

Component-ID 1203wi04 valid until 31st December 2018

Passive House Institute  
Dr. Wolfgang Feist  
64283 Darmstadt  
Germany

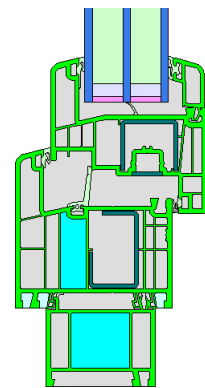


Category: **Window Frame**  
Manufacturer: **CONSTRUAL, S.L.,  
Navarrete (La Rioja),  
Spain**  
Product name: **Construal Passiv-Vent**

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

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

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



Passive House  
efficiency class

phE

phD

phC

phB

phA






warm, temperate climate



**CERTIFIED  
COMPONENT**

Passive House Institute



Frame values			Frame width $b_f$ mm	$U$ -value frame $U_f$ W/(m <sup>2</sup> K)	$\Psi$ -panel edge $\Psi_g$ W/(m K)	Temp. Factor $f_{RSi=0.25}$ [-]
Top	(to)		132	1.01	0.024	0.71
Side	(s)		132	1.01	0.024	0.71
Bottom	(bo)		174	1.07	0.024	0.71
Mullion flying	(fm)		170	1.12	0.022	0.69
Mullion 2 casements	(m2)		204	1.14	0.023	0.62
Spacer: SWISSPACER Ultimate			Secondary seal: Polysulfide			

### Validated installations

