

# CERTIFICATE

Certified Passive House Component

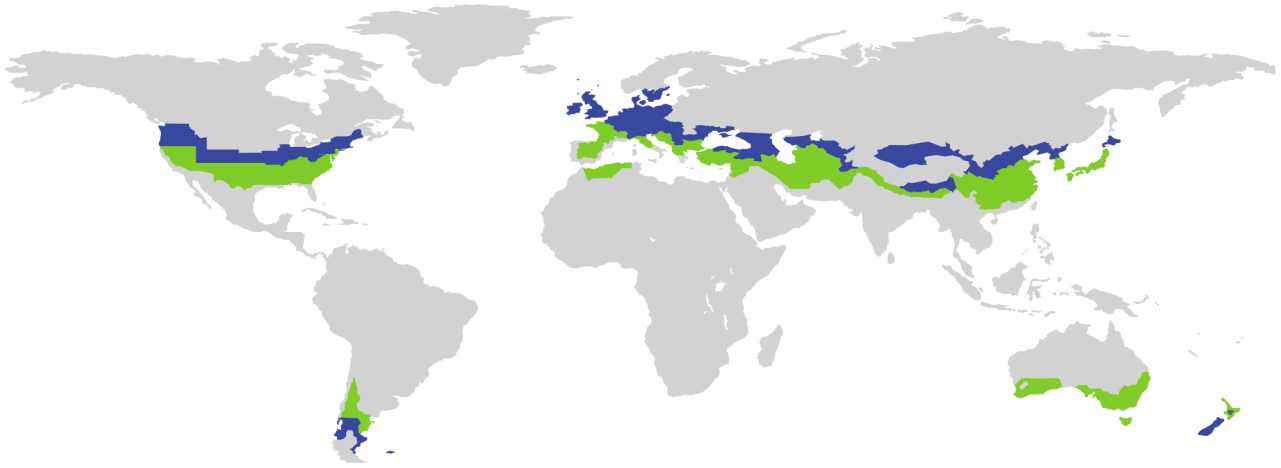
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Passive House Institute

Dr. Wolfgang Feist

64342 Darmstadt

GERMANY



Category **Construction system | Solid construction**  
Manufacturer **Brillux GmbH & Co. KG**  
**Münster**  
**GERMANY**  
Product name **PassivHaus WDV-System**

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

## Hygiene criterion

The minimum temperature factor of the interior surfaces is

$$f_{R_{si}=0,25m^2K/W} \geq 0.70$$

## Comfort criterion

The U-value of the installed windows is

$$U_{W,i} \leq 0.85 \text{ W}/(m^2K)$$

## Efficiency criteria

Heat transfer coefficient of building envelope

$$U \cdot f_{PHI} \leq 0.15 \text{ W}/(m^2K)$$

Temperaturfactor of opaque junctions

$$f_{R_{si}=0,25m^2K/W} \geq 0.86$$

Thermal bridge free design for key connection details

$$\Psi \leq 0.01 \text{ W}/(m^2K)$$

An airtightness concept for all components and connection details was provided.



cool, temperate climate

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

## Determined values

<b>Thermal heat transfer coefficient</b>	<b>Dimension [m]</b>	<b>U-Wert [W/(m²K)]</b>
EW01 - External Wall	0.46	0.145
RO01 - Roof	0.34	0.140
BC01 - Basement Ceiling	0.46	0.152

<b>Thermal bridge coefficient opaque envelop</b>	<b>fRsi [-]</b>	<b>Ψ [W/(mK)]</b>
EWOI01 - External Wall Offset Insulation	0.98	0.003
BCEW01 - Basement Ceiling External Wall	0.96	0.009
BCEW01 - Basement Ceiling External Wall	0.93	0.026
BCIW01 - Basement Ceiling Internal Wall	0.95	0.009
EWHB01 - External Wall Heated Basement Ceiling	0.95	0.089
BFIW01 - Basement Floor Internal Wall	0.94	0.081
BFIW02 - Basement Floor Internal Wall	0.90	0.040
BWEC01 - Basement Wall Outer Corner	0.93	-0.066
BWIC01 - Basement Wall Inner Corner	0.96	0.034
BWIW01 - Basement Wall Internal Wall	0.96	0.000
BWSC01 - Basement Wall Stair Case	0.94	0.090
EWEC01 - External Wall Outer Corner	0.92	-0.053
EWIC01 - External Wall Inner Corner	0.97	0.027
EWCE01 - External Wall internal CEiling	0.94	0.031
EWIW01 - External Wall Internal Wall	0.97	0.006
ROEA01 - Roof Eaves	0.93	-0.011
CCEA01 - Collarbeam Ceiling Eaves	0.94	0.008
ROVE01 - Roof Verge	0.90	-0.054
CCVE01 - Collar Ceiling Verge	0.90	-0.045
ROIW01 - Roof Internal Wall	0.97	0.009
CCIW01 - Collarbeam Ceiling Interior Wall	0.97	0.006
RORI01 - Roof Ridge	0.91	-0.035
MREA01 - Monopitched Roof Eaves	0.92	-0.044
MRRIO1 - Monopitched Roof Ridge	0.91	-0.059