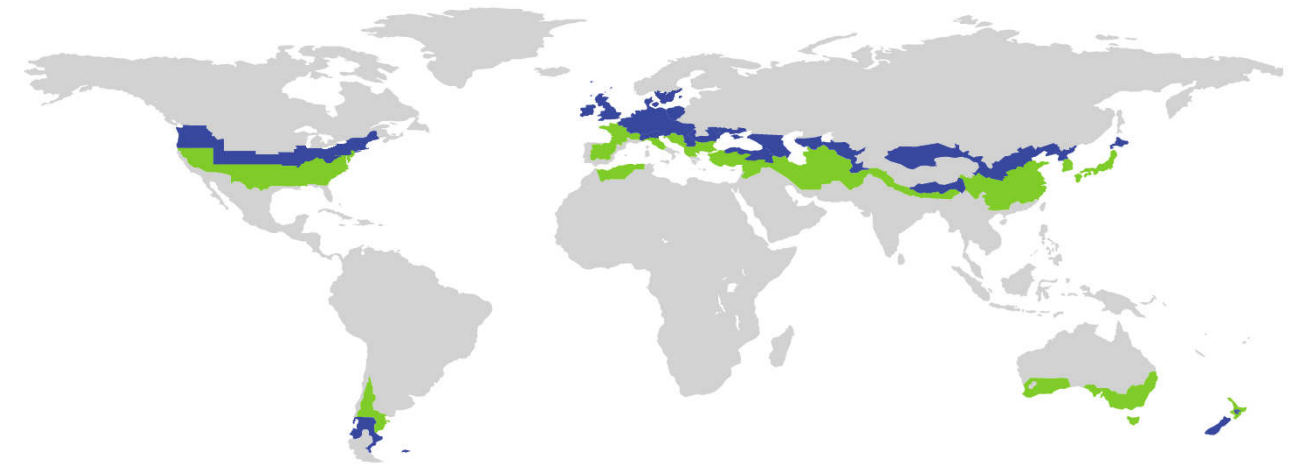


CERTIFICATE

Certified Passive House Component

ID: 1810wa03 valid until 31. December 2025

Passive House Institute
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64342 Darmstadt
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Category **Wall system | Insulated Formwork blocks**
Manufacturer **ICF Moulding B.V.
Emmeloord
NL**
Product name **Passiefbouwblok
(cold climate zone)**

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

$$U_{w,i} \leq 0,85 \text{ W}/(\text{m}^2\text{K})$$

Efficiency criteria

Heat transfer coefficient of building envelope

$$U \cdot f_{PHI} \leq 0,15 \text{ W}/(\text{m}^2\text{K})$$

Temperaturfactor of opaque junctions

$$f_{R_{si}=0,25m^2K/W} \geq 0,86$$

Thermal bridge free design for key connection details

$$\Psi \leq 0,01 \text{ W}/(\text{m}^2\text{K})$$

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



Opaque building envelop

The certified Passief Bouwblok is an Insulated Concrete Forms (ICF) facade system. The blocks are 400 mm wide and consist of two layers of Neopor, 0,031 W/(mK), which are firmly connected with plastic spacers. The 140mm gap is filled with concrete. The facade is finished with plaster. Stone strips and also facade cladding is also possible. The system can be combined with various types of (prefab) foundation and roof systems. The Passive House element certification is carried out with the Hectar floor system and self-supporting roof plates.

Windows

The windows, Enersign Primus, are made of spruce/fir frame (0.11 W/(mK)), insulated on the outside with thermoplastic foam and finished with aluminium. A 48 mm glazing and SWISSPACER Ultimate where taken into account. The window represents a very good energy-standard in itself. Connection details with a strong and rigid EPS-foam, Compacfoam, leads to low thermal bridges and high inner surface temperatures.

Airtightness concept

The in situ concrete floor construction, the interior plaster and the OSB boards in the roof are the airtight layer. The airtight connections between floor-outside walls, outside wall-roof and outside wall-windows are provided by properly applied Cantex, a multifunctional liquid rubber

Explanatory notes

The Passive House Institute has defined international component criteria for seven climate zones based on hygiene-, comfort- and affordability criteria. In principle, components which have been certified for climate zones with higher requirements may also be used in climates with less stringent requirements. This use might make sense in certain circumstances.

Thermal bridge not calculated
Criteria achieved

Efficiency criteria not achieved
Hygiene- or comfortcriterion not achieved

