

CERTIFICATE

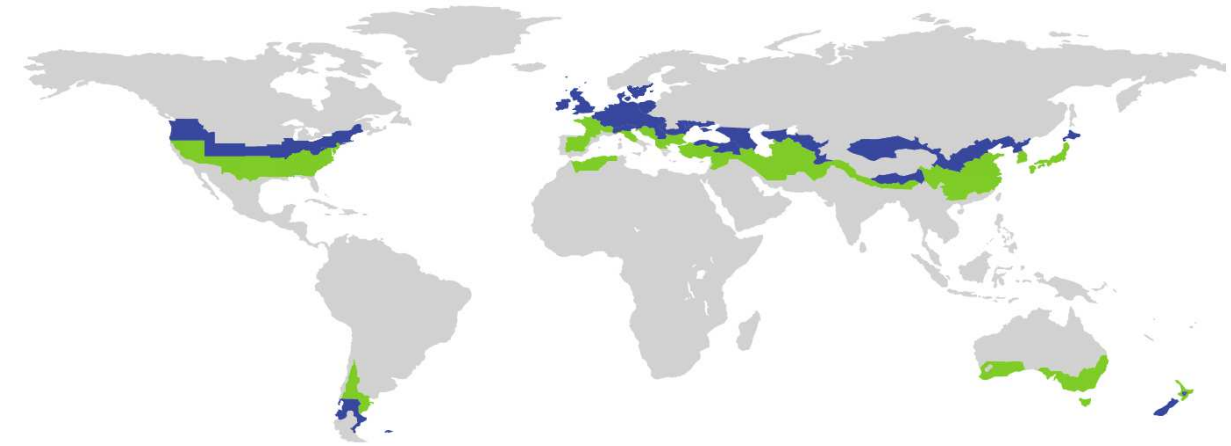
Certified Passive House Component

ID: 0937cs03 valid until 31. December 2017

Passive House Institute
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Additional thermal bridges

Name	Thermal bridge	f_{Rsi}	Description
EWPA01	X= 0,001 W/K	1,00	Point thermal bridge wall-anchor



Category	Wall system Solid construction with EIFS
Manufacturer	Rockwool Ltd. CF35 6NY UNITED KINGDOM
Product name	REDArt® External Wall Insulation 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 $f_{Rsi=0,25m^2K/W} \geq 0,70$

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

Temperature factor of opaque junctions $f_{Rsi=0,25m^2K/W} \geq 0,86$

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 system comprises a concrete block substrate, fitted with an exterior insulation finishing system made from renewable volcanic rock of 220 mm (up to 300 mm) thickness, fixed with cement mortar and polypropylene / steel insulation anchors drilled into the concrete as needed. The inside of the wall is finished with gypsum plasterboard mounted on dabs. The system is intended for both new-build and retrofit application.

Windows

Certification was undertaken using a generic, Passive House-standard triple-glazed window unit, featuring Super Spacer Triseal thermal values for the spacer, a polysulfide secondary seal and argon gas filling. Solid timber frames were used throughout.

Airtightness concept

Air tightness is ensured by a combination of air tightness membrane to the inside of the external walls, and air tightness tape at junctions between panels and around window and door reveals.

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 comfort criterion not achieved

