

# CERTIFICATE

Certified Passive House Component

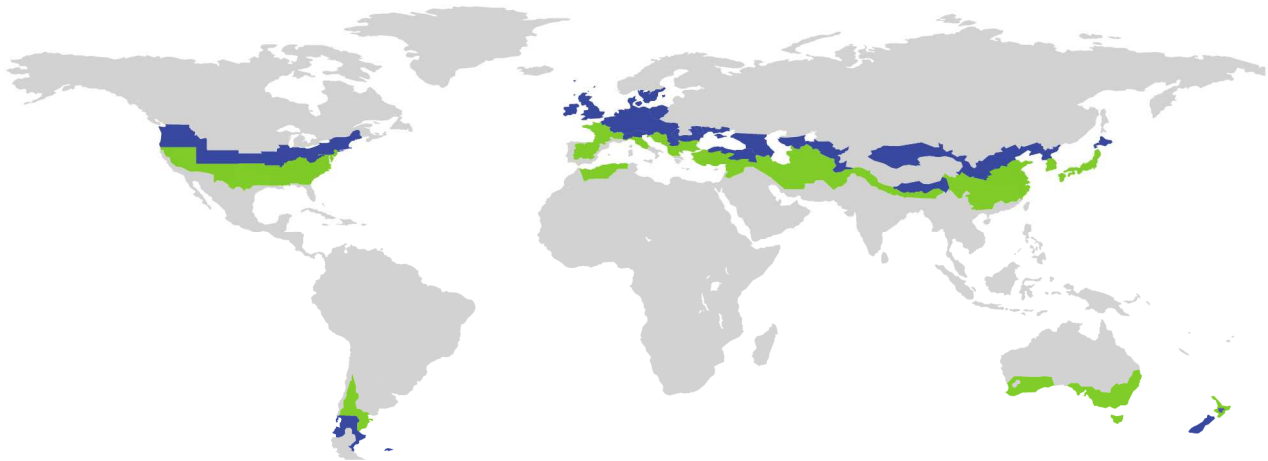
ID: 0357cs03 valid until 31. December 2019

Passive House Institute

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Category	<b>Construction system   Solid construction</b>
Manufacturer	<b>Saint-Gobain ISOVER COURBEVOIE FRANCE</b>
Product name	<b>ISOVER Massivbausystem für Passivhäuser (mit hinterlüfteter Fassade)</b>

**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/(m<sup>2</sup>K)]</b>
EW01 - External Wall	0.51	0.115
MR01 - Monopitched Roof	0.37	0.110
MR02 - Monopitched Roof	0.37	0.116
RO01 - Roof	0.35	0.126
RO02 - Roof	0.38	0.105
RO03 - Roof	0.34	0.117
FR01 - Flat Roof	0.61	0.108
FR02 - Flat Roof	0.53	0.109
FR03 - Flat Roof	0.57	0.118
FS01 - Floor Slab	0.72	0.103
BC01 - Basement Ceiling	0.40	0.159
BW01 - Basement Wall	0.42	0.168
TC01 - Top Ceiling	0.60	0.095

<b>Thermal bridge coefficient opaque envelop</b>	<b>fRsi [-]</b>	<b>Ψ [W/(mK)]</b>
FSFE01 - Floor Slab Strip Foundation External Wall	0.90	-0.056
BCEW01 - Basement Ceiling External Wall	0.98	0.020
EWIW01 - External Wall Internal Wall	0.97	-0.001
EWCE01 - External Wall internal CEiling	0.97	0.009
EWCE02 - External Wall internal CEiling	0.96	0.012
FSEW01 - Floor Slab External Wall	0.98	-0.042
BCIW01 - Basement Ceiling Internal Wall	0.97	0.009
BCEW01 - Basement Ceiling External Wall	0.97	-0.045
EWHB01 - External Wall Heated Basement Ceiling	0.96	0.002
EWHB02 - External Wall Heated Basement Ceiling	0.91	-0.019
ROEA01 - Roof Eaves	0.96	-0.012
RORI01 - Roof Ridge	0.94	-0.042
ROVE01 - Roof Verge	0.93	-0.039