CERTIFICATE

Certified Passive House Component

ID: 0347cs03 valid until 31. December 2025

Passive House Institute
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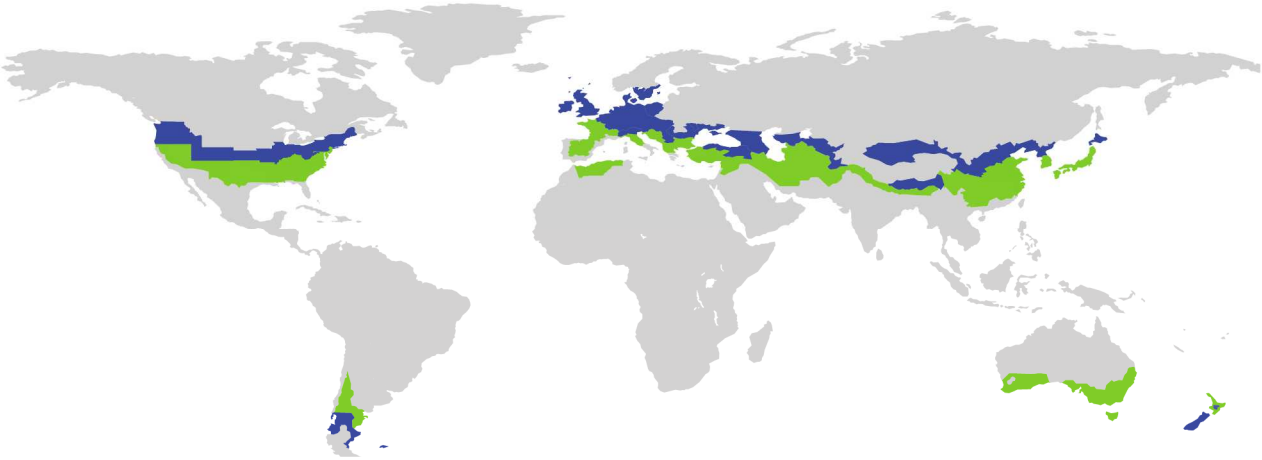

Catregory	**Construction system | Lightweight construction**
Manufacturer	**Metsäliitto Cooperative, Metsä Wood** **Lohja** **Finland**
Product name	**Kerto-Bausystem**

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** W/(m²K)

Efficiency criteria

Heat transfer coefficient of building envelope	$U*f_{PHI} \leq$	**0.15** W/(m²K)
Temperaturfactor of opaque junctions	$f_{Rsi=0,25m^2K/W} \geq$	**0.86**
Thermal bridge free design for key connection details	$\Psi \leq$	**0.01** W/(m²K)

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

cool, temperate climate

CERTIFIED COMPONENT
Passive House Institute

Metsäliitto Cooperative, Metsä Wood

P.O. BOX 24, FI-08101 Lohja, Finland

www.metsagroup.com/metsawood

Determined values

Thermal heat transfer coefficient	Dimension [m]	U-Wert [W/(m²K]
EW01 - External Wall	0.40	0.119
EW02 - External Wall	0.34	0.143
EW03 - External Wall	0.50	0.154
RO01 - Roof	0.36	0.134
RO02 - Roof	0.37	0.142
FR01 - Flat Roof	0.44	0.111
BC01 - Basement Ceiling	0.39	0.149
FS01 - Floor Slab	0.65	0.128

Thermal bridge coefficient opaque envelop	fRsi [-]	Ψ [W/(mK)]
BCEW01 - Basement Ceiling External Wall	0.97	-0.048
BCEW02 - Basement Ceiling External Wall	0.99	0.000
FSEW01 - Floor Slab External Wall	0.97	-0.029
FSEW02 - Floor Slab External Wall	0.98	-0.022
BCEW01 - Basement Ceiling External Wall	0.97	-0.044
BCEW02 - Basement Ceiling External Wall	0.97	-0.039
EWIC01 - External Wall Inner Corner	0.98	0.025
EWIC02 - External Wall Inner Corner	0.99	0.022
EWEC01 - External Wall Outer Corner	0.98	-0.063
EWEC02 - External Wall Outer Corner	0.99	-0.055
EWIW01 - External Wall Internal Wall	1.00	0.000
EWIW02 - External Wall Internal Wall	1.00	0.000
EWCE01 - External Wall internal CEiling	0.98	0.000
EWCE02 - External Wall internal CEiling	0.98	0.000
ROEA01 - Roof Eaves	0.96	-0.007
ROEA02 - Roof Eaves	0.96	-0.008
ROVE01 - Roof Verge	0.93	-0.016
ROVE02 - Roof Verge	0.94	-0.012
FRRP01 - Flat Roof Roof Parapet	0.96	0.004
FRRP02 - Flat Roof Roof Parapet	0.96	0.007
ROEA03 - Roof Eaves	0.97	-0.064
ROEA04 - Roof Eaves	0.97	-0.060