CERTIFICATE

Certified Passive House Component

ID: 1766cs02 valid until 31. December 2025

Passive House Institute
Dr. Wolfgang Feist
64342 Darmstadt
GERMANY

Category	**Construction system | Lightweigt timber construction**
Manufacturer	**WUDD CONSTRUCTION AB** **Stockholm** **SWEDEN**
Product name	**WUDD WALL SYSTEM** **(cold climate zone)**

This certificate for the cold climate zone was awarded based on the following criteria

Hygiene criterion

The minimum temperature factor of the interior surfaces is	$f_{Rsi=0,25m^2K/W} \geq$	**0,75**

Comfort criterion

The U-value of the installed windows is	$U_{W,i} \leq$	**0,65** W/(m²K)

Efficiency criteria

Heat transfer coefficient of building envelope	$U*f_{PHI} \leq$	**0,12** W/(m²K)
Temperaturfactor of opaque junctions	$f_{Rsi=0,25m^2K/W} \geq$	**0,88**
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.

cold climate

CERTIFIED COMPONENT
Passive House Institute

WUDD CONSTRUCTION AB
Karlbergsvägen 8 c/o Uddare, 113 27 Stockholm, SWEDEN
Phone: | 0046 70 935 14 17 | info@wudd.se | wudd.se

Opaque building envelop

The timber structure is built on a concrete floor slab insulated with cellular glass boards from below. The exterior walls are formed by laminated veneer lumber to which the wooden I-beams are attached and insulated with blown-in cellulose. The wood fiberboards serve as the windtight layer. The outer finish is vertical timber facade. The roof construction is formed by prefabricated roof trusses, insulated with blown-in cellulose.

Windows

The certification was done with the smartwin compact window with 86 mm frame width.

Airtightness concept

The airtightness layer in the walls is formed by laminated veneer lumber elements. In the roof an airtightness membrane forms the airtight layer. The connections are sealed by airtight tape.

Explainatory 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
Efficieny driteria not achieved
Hygiene- or comfortcriterion not achieved