

Certificate

Certified Passive House component

for cool, temperate climate, valid until 31.12.2025

Category: **Facade anchor**
Manufacturer: **Q-VENT**
1220 Sofia, Bulgaria
Product name: **QTB Stainless Steel Wall Brackets**

The following criteria were used in awarding this certificate:

Efficiency Criterion

In a typical application*, the construction fulfills the requirements of

$$\text{Eff.fa} \leq 0.200 \text{ W/(kNK)}$$

Comfort Criterion

The inner surface must be warm enough to prevent mold as well as uncomfortable down-drafts and radiation losses.

$$\theta_{i,\min} \geq 17^{\circ}\text{C}$$

Thermal data of the certified component

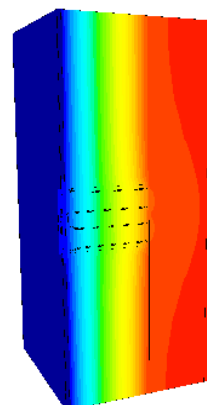
IG WMS (Welded Masonry Support)	Thermal bridge coefficient χ [W/K]	Minimum interior surface temperature $\theta_{i,\min}$ [°C]
Festpunkt	0.019	19.25
Gleitpunkt	0,009	19.35

* The criterion has been validated with a representative facade of a school building

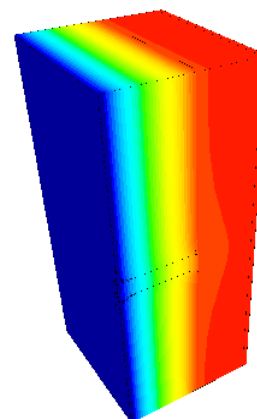
www.passivehouse.com

2338fa03

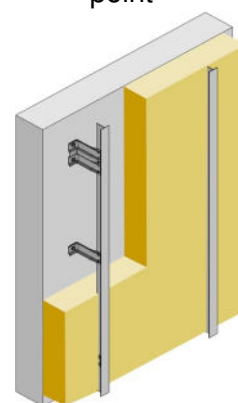
Passive House Institute
64283 Darmstadt
GERMANY



Isothermal map fixed point



Isothermal map sliding point



Representation

cool, temperate climate



**CERTIFIED
COMPONENT**

Passive House Institute

Data sheet Q-VENT QTB Stainless Steel Wall Brackets

Manufacturer Q-VENT
1A Prof. Ivan Georgov, 1220 Sofia, Bulgaria
www.q-vent.com

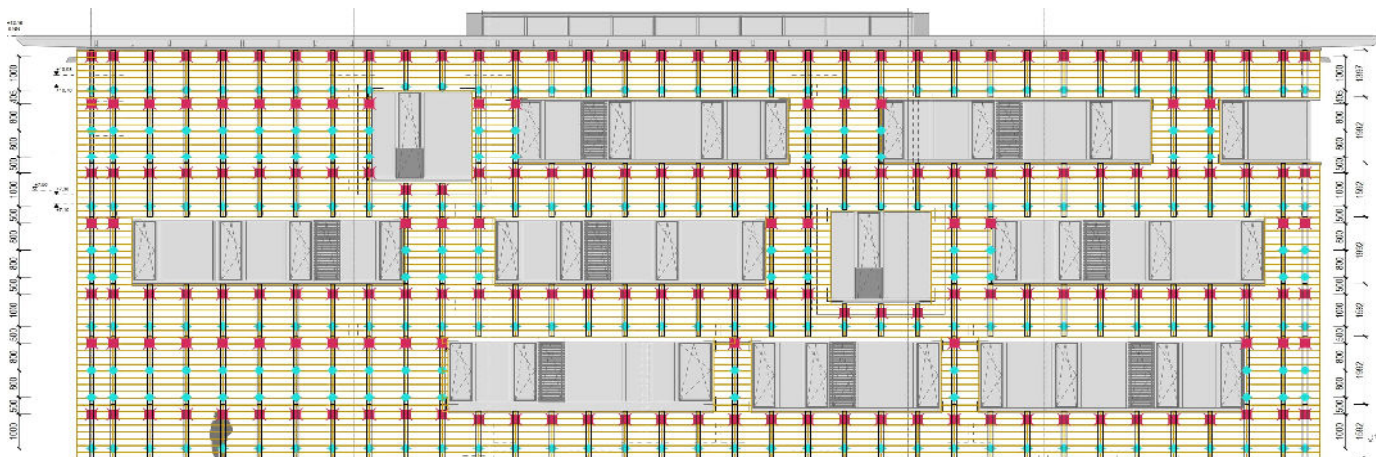
Criteria validated based on reference facade	Δ_U [W/m ² K]
LC I – VI	0.0183

In order to validate the suitability, the manufacturer provides a statical calculation and an associated installation plan for the reference facade.

The calculations are carried out for a reference facade with 24 cm insulation (0.035 W/(mK)). To reach an U-value of 0.15 W/(m²K), an additional 1 cm of insulation is necessary.

Load class / Facade weight		Thermal bridge coefficients [W/K]	
LC / Material	[kN/m ²]	X _{FP}	X _{SP}
6 / Stone	0.32	0.0186	0.0086

Quantity per m ²		[W/m ² K]	[W/(kNk)]
FP	SP	Δ_U	Eff. fa
0.62	0.78	0.018	0.057



Installation-plan reference facade of the certified component (LC VI)

Load-class (LC)	Facade cladding	Facade weight [kN/m ²]	Efficiency criterion fulfilled?
I	Aluminium laminated	0.10	yes
II	ACM	0.15	yes
III	Fiber-cement plates	0.20	yes
IV	Acrylic glass	0.25	yes
V	Ceramics	0.30	yes
VI	Stone	0.50	yes

The classification criteria and the load class allocation can be found in the current criteria "Certified Passive House components – Facade anchors, Version 2.1, 27.05.2021".