

Certificate

Certified Passive House component

for cool, temperate climate, valid until 31.12.2022

Category: **Facade anchor**
 Manufacturer: **FERO Corporation**
Edmonton, CANADA
 Product name: **FERO FAST™ Thermal 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

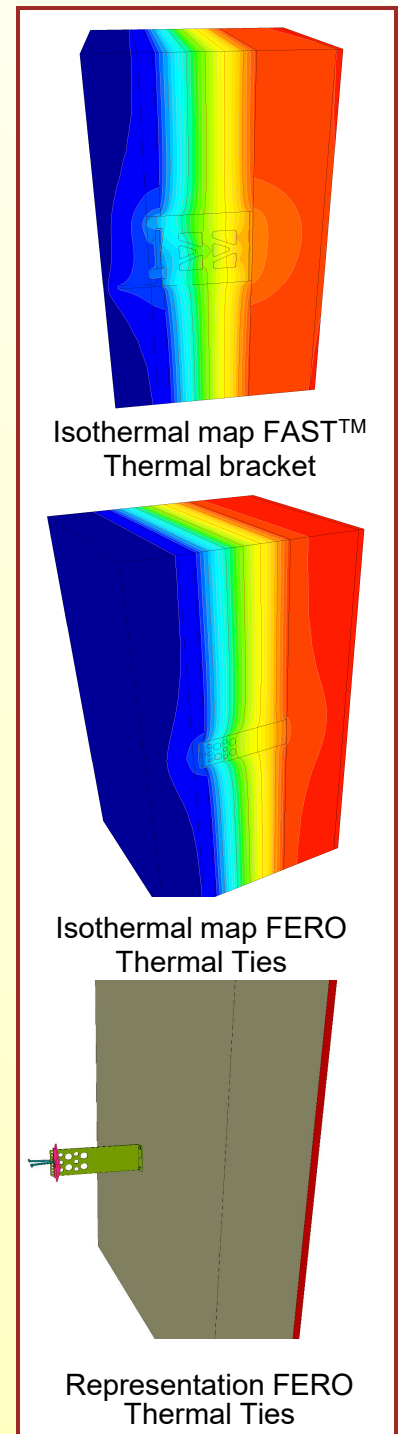
The inner surface must be warm enough to prevent mold as well as uncomfortable down-drafts and radiation losses.

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

Thermal data of the certified component

| FERO FAST™ Thermal Brackets | Thermal bridge coefficient χ [W/K] | Minimum interior surface temperature $\theta_{i,\min}$ [°C] |
|---|--|--|
| FAST Thermal Bracket - stainless steel | 0.0807 | 18.27 |
| FAST Thermal Lintel Bracket - stainless steel | 0.0805 | 18.28 |
| FERO Thermal Ties - stainless steel | 0.0102 | 19.15 |

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



cool, temperate climate



CERTIFIED COMPONENT

Passive House Institute

Data sheet FERO Corporation, FERO FAST™ Thermal Brackets

Manufacturer FERO Corporation
 15305 - 117th Avenue, T5M 3X4, Edmonton
 www.ferocorp.com

| | |
|--|---|
| Criteria validated based on reference facade | ΔU [W/m²K] |
| LC VI | 0.055 |

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

| Load class / Facade weight | | Thermal bridge coefficients [W/K] | | |
|----------------------------|----------------------|-----------------------------------|--|--------------------------------|
| LC / Material | [kN/m ²] | X _{FAST Thermal Bracket} | X _{FAST Thermal Lintel Bracket} | X _{FERO Thermal Ties} |
| VI / Brick | 1.92 | 0.0807 | 0.0805 | 0.0102 |

| Efficiency | Δ_U | Quantity / m ² | | |
|------------|----------------------|---------------------------|-----------------------------|-------------------|
| [W/(kNK)] | [W/m ² K] | FAST Thermal Bracket | FAST Thermal Lintel Bracket | FERO Thermal Ties |
| 0.0287 | 0.0552 | 0.185 | 0.247 | 2.00 |



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 | not evaluated |
| II | Plastic | 0.15 | not evaluated |
| III | Fiber-cement plates | 0.20 | not evaluated |
| IV | Acrylic glass | 0.25 | not evaluated |
| V | Ceramics | 0.30 | not evaluated |
| VI | Brick | 1.92 | yes |

The classification criteria and the load class allocation can be found in the current criteria "Zertifizierte Passivhaus Komponente – Fassadenanker, Version 2.0, 08.05.2017".