

# Certificate

valid until 31.12.2019

**Low Energy  
Component:**

**Halfen Balcony Connection  
HIT-HP MVX & SP MVX  
180 mm slab thickness**

**Hersteller: HALFEN GmbH  
Liebigstraße 14 40764 Langenfeld**

**The following criteria were used in awarding this certificate:**

Efficiency Criterion

In two typical applications<sup>\*)</sup>, the construction is

$$\Delta U_{WB} < 0.025 \text{ W/(m}^2\text{K)}$$

Comfort Criterion

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

$$\theta_{i,min} > 17.00 \text{ } ^\circ\text{C}$$

**The following thermal data were determined:**

HALFEN HIT ISO-Element	minimum temperature of the inner surface $\theta_{Si,min}$ [°C]	thermal bridge coefficient $\Psi$ [W/(mK)]
HIT-HP MVX-0404-18-100-35	18.33	0.20
HIT-HP MVX-0504-18-100-35	18.26	0.21
HIT-HP MVX-0506-18-100-35	18.03	0.25
HIT-HP MVX-0804-18-100-35	18.18	0.23
HIT-SP MVX-0504-18-100-35	18.58	0.16
HIT-SP MVX-0705-18-100-35	18.41	0.19
HIT-SP MVX-0804-18-100-35	18.50	0.17
HIT-SP MVX-0907-18-100-35	18.15	0.22
HIT-SP MVX-1006-18-100-35	18.26	0.21
HIT-SP MVX-1008-18-100-35	18.40	0.24
HIT-SP MVX-1107-18-100-35	18.11	0.24
HIT-SP MVX-1208-18-100-35	18.00	0.25

<sup>\*)</sup> The criterion was validated on both, a row house and a apartment dwelling.

The certificate includes types with minor statical performance. The thermal bridge coefficient can be approximated by linear interpolation.

