


# Certificate

valid until 31.12.2019

 **Passivhaus  
Institut**  
Dr. Wolfgang Feist  
Rheinstraße 44/46  
D-64283 Darmstadt

## Balcony connection

with height offset

Low Energy Component

**HIT-SP MVX-...-OU/-OD**  
**160 - 240 mm slab thickness**

**Manufacturer:** Halfen GmbH  
40764 Langenfeld, GERMANY

The following criteria were used in awarding this certificate:

### Efficiency Criterion

In two typical applications<sup>1)</sup>, the construction is

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

### Comfort Criterion

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

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

Following heat transmission coefficients ( $\Psi$  [W/(mK)])  
have been validated:

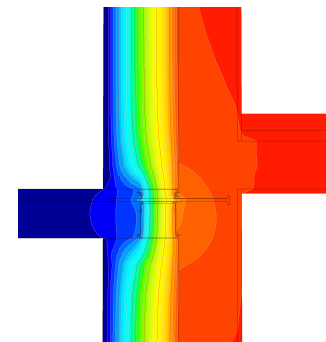
Product	Slab thickness			
	160	180	220	240
HIT-SP-MVX-0504-hh <sup>1)</sup> -100-35-OD	-	0.175	0.179	0.182

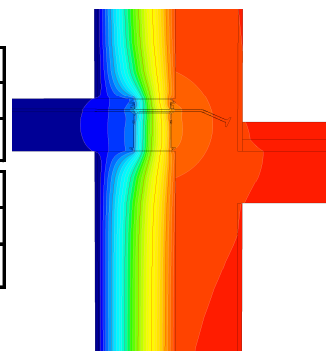
Product	Slab thickness			
	160	180	220	240
HIT-SP-MVX-0504-hh <sup>1)</sup> -100-35-OU	-	0.170	0.178	0.180

<sup>1)</sup> hh - slab thickness [cm]

<sup>2)</sup> The criterion was validated on both, a row house and a apartment dwelling (according to criteria "balcony connection" v2.1.1)  
The certificate includes types with minor statical performance. The thermal bridge coefficient can be approximated by linear interpolation



Isothermal map of  
HIT-SP MVX-0504-18-100-  
35-OD



Isothermal map of  
HIT-SP MVX-0504-18-100-  
35-OU

