

● **Two-layer insulation against basement, unheated rooms and soil**

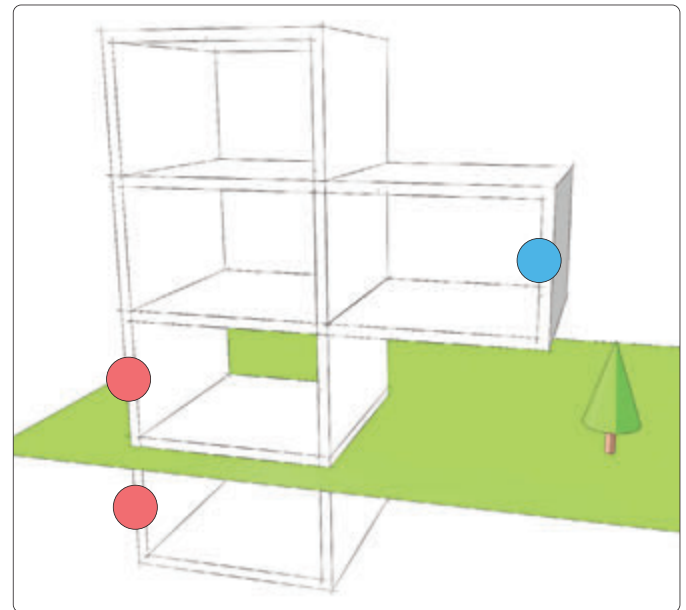
Type	Thickness	Thermal resistance
EPS 045 DES sm	30 mm	
EPS 035 DE0	60 mm	
Total	90 mm	$\geq 2,82 \text{ m}^2 \cdot \text{k/W}$

● **Option 2**

Type	Thickness	Thermal resistance
EPS 035 DES sg	30 mm	
EPS 035 DE0	50 mm	
Total	80 mm	$\geq 2,82 \text{ m}^2 \cdot \text{k/W}$

● **Option 3**

Type	Thickness	Thermal resistance
EPS 040 DES sg	30 mm	
PUR P-WD 025	40 mm	
Total	70 mm	$\geq 2,82 \text{ m}^2 \cdot \text{k/W}$



● **Two-layer insulation against external air**

Type	Thickness	Thermal resistance
EPS 035 DE0	50 mm	
EPS 035 DE0	60 mm	
Total	110 mm	$\geq 3,52 \text{ m}^2 \cdot \text{k/W}$

● **Option 2**

Type	Thickness	Thermal resistance
PUR P-WD 025	40 mm	
EPS 035 DE0	60 mm	
Total	100 mm	$\geq 3,52 \text{ m}^2 \cdot \text{k/W}$

● **Option 3**

Type	Thickness	Thermal resistance
PUR P-WD 025	40 mm	
PUR P-WD 025	40 mm	
Total	80 mm	$\geq 3,52 \text{ m}^2 \cdot \text{k/W}$

Minimum requirements according to GEG (from 2020) for residential buildings: The thermal resistances shown refer to the entire floor structure incl. screed.

Abbreviations

EPS = Expanded polystyrene rigid foam

DE0 = Insulation under screed without sound insulation requirement

DES = Insulation under screed with sound insulation requirement

sm = Acoustic property, medium compressibility

sg = Acoustic property, low compressibility

● **Single-layer insulation against rooms with the same type of use, i.e. against heated rooms, e.g. storey ceilings in single-family houses**

Type	Thickness	Thermal resistance
EPS 045 DES sm	35 mm	$\geq 0,75 \text{ m}^2 \cdot \text{k/W}$

● **Option 2**

Type	Thickness	Thermal resistance
EPS 040 DES sg	30 mm	$\geq 0,75 \text{ m}^2 \cdot \text{k/W}$

● **Option 3**

Type	Thickness	Thermal resistance
EPS 035 DES sg	30 mm	$\geq 0,857 \text{ m}^2 \cdot \text{k/W}$

● **Two-layer insulation against external air**

Type	Thickness	Thermal resistance
EPS 040 DE0	40 mm	
EPS 040 DE0	40 mm	
Total	80 mm	$\geq 2,0 \text{ m}^2 \cdot \text{k/W}$

● **Option 2**

Type	Thickness	Thermal resistance
EPS 035 DE0	30 mm	
EPS 035 DE0	40 mm	
Total	70 mm	$\geq 2,0 \text{ m}^2 \cdot \text{k/W}$

● **Single-layer insulation against external air**

Type	Thickness	Thermal resistance
EPS 040 DE0	80 mm	$\geq 2,0 \text{ m}^2 \cdot \text{k/W}$

● **Option 2**

Type	Thickness	Thermal resistance
PUR P-WD 025	50 mm	$\geq 2,0 \text{ m}^2 \cdot \text{k/W}$

● **Two-layer insulation against rooms with non-similar use and/or commercial rooms, cellars and unheated rooms, soil**

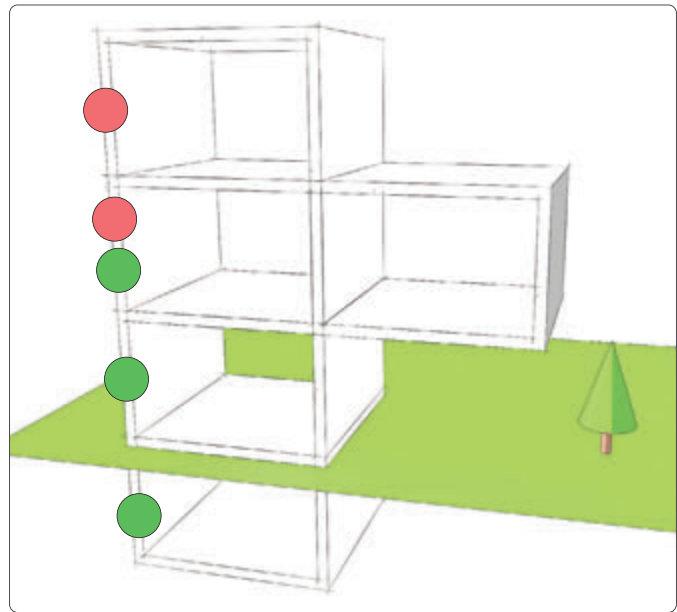
Type	Thickness	Thermal resistance
EPS 045 DES sm	35 mm	
EPS 040 DE0	20 mm	
Total	55 mm	$\geq 1,25 \text{ m}^2 \cdot \text{k/W}$

● **Option 2**

Type	Thickness	Thermal resistance
EPS 040 DES sg	30 mm	
EPS 040 DE0	20 mm	
Total	50 mm	$\geq 1,25 \text{ m}^2 \cdot \text{k/W}$

● **Option 3**

Type	Thickness	Thermal resistance
EPS 035 DES sg	30 mm	
EPS 035 DE0	15 mm	
Total	45 mm	$\geq 1,25 \text{ m}^2 \cdot \text{k/W}$



Minimum requirements according to DIN EN 1264-4 (EU)

The thermal resistances shown refer to the insulation layers only.

Abbreviations

EPS = Expanded polystyrene rigid foam

DE0 = Insulation under screed without sound insulation requirement

DES = Insulation under screed with sound insulation requirement

sm = Acoustic property, medium compressibility

sg = Acoustic property, low compressibility