

Certificate No: CBA-P8-C-A1

Issued : January 2016

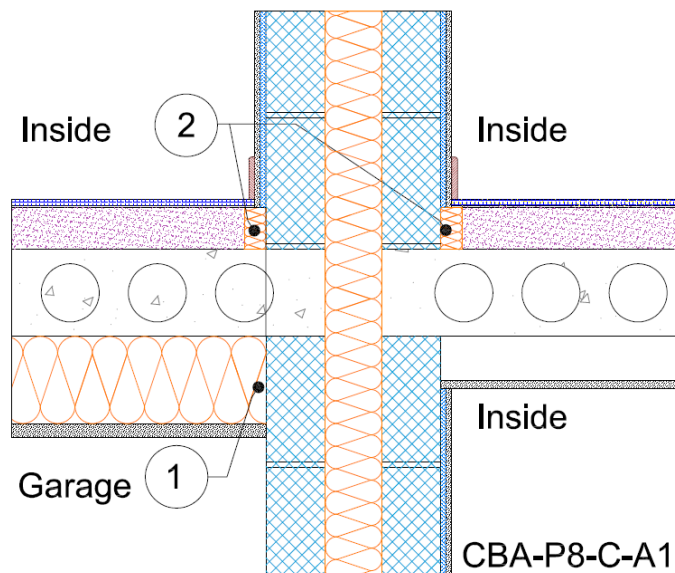
Issued by Concrete Block Association

**Exposed floor
(Inverted)**
Table K.1 Ref P8
Default ψ -value =
0.24 W/mK

Inner leaf	100 mm blockwork
Cavity	Full fill insulation
Outer leaf	100 mm blockwork
Semi-exposed floor	Precast concrete hollow core floor over garage with 150mm of insulation, $\lambda = 0.037$ below the hollow core deck

Key Points

1. Ensure that the floor insulation is tightly butted to the wall
2. Install perimeter insulation with a resistance of at least 0.8 m²K/W at the edges of the screed



Calculations have been performed in accordance with:
BS EN ISO 10211:2007, BR497 and BS EN ISO 13370:2007

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Calculated ψ -values and f-values for exposed floor (inverted) and **cavity insulation** as highlighted

*The ψ -value applied to each dwelling around the junction should be allocated as follows:

- 2 dwellings – 2/3 of tabulated value to dwelling occupying 2 segments around junction and 1/3 of tabulated value to dwelling occupying 1 segment around junction
- 3 dwellings – 1/3 of tabulated value to each dwelling

1. With lightweight blocks in the separating wall $\lambda = 0.6$ W/mK

	Inner leaf blockwork					
	Ultra lightweight		Lightweight		Dense	
Cavity Insulation	ψ -value W/mK*	f-value	ψ -value W/mK*	f-value	ψ -value W/mK*	f-value
100mm $\lambda=0.037$	0.089	0.943	0.163	0.921	0.274	0.889
100mm $\lambda=0.032$	0.091	0.942	0.165	0.920	0.275	0.888
150mm $\lambda=0.037$	0.095	0.941	0.169	0.918	0.278	0.885
150mm $\lambda=0.032$	0.096	0.940	0.170	0.917	0.278	0.885

2. With dense blocks in the separating wall $\lambda = 1.33$ W/mK

	Inner leaf blockwork					
	Ultra lightweight		Lightweight		Dense	
Cavity Insulation	ψ -value W/mK*	f-value	ψ -value W/mK*	f-value	ψ -value W/mK*	f-value
100mm $\lambda=0.037$	0.092	0.947	0.170	0.927	0.289	0.896
100mm $\lambda=0.032$	0.094	0.947	0.171	0.926	0.289	0.894
150mm $\lambda=0.037$	0.098	0.945	0.176	0.924	0.292	0.892
150mm $\lambda=0.032$	0.099	0.945	0.177	0.923	0.293	0.891

The f-value should be above 0.75 to minimise the risk of mould in dwellings.

On-site Checklist

1. Floor insulation is tightly butted to the wall
2. Perimeter insulation with a resistance of at least 0.8 m²K/W installed at the edge of the screed

Signed:

Site manager/supervisor.....

Site name.....

Plot number.....

Date.....