

**Certificate No: CBA-P8-C-A2**

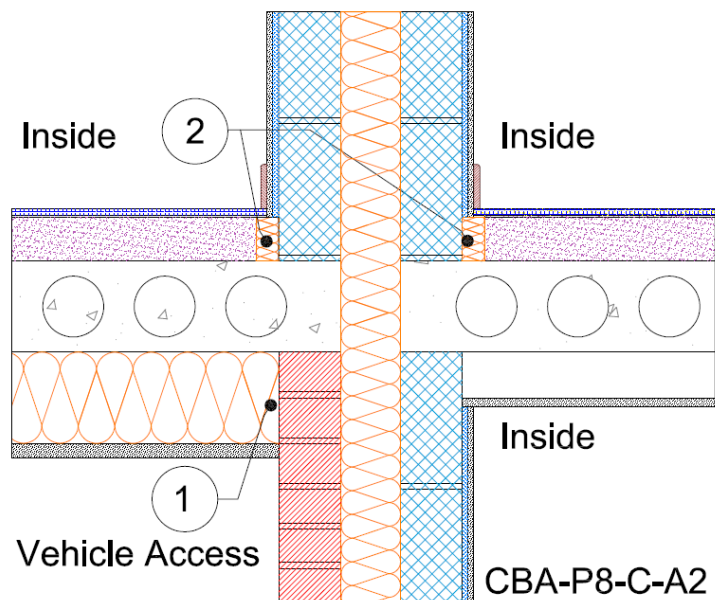
**Issued : January 2016**

**Issued by Concrete Block Association**

<b>Exposed floor (Inverted)</b> Table K.1 Ref P8 Default $\psi$ -value = 0.24 W/mK	Inner leaf	100 mm blockwork
	Cavity	Full fill insulation
	Outer leaf	102 mm brick $\lambda = 0.77$
	Exposed floor	Precast concrete hollow core floor over vehicle access 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 m<sup>2</sup>K/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  $\psi$ -values and f-values for exposed floor (inverted) and cavity insulation as highlighted

\*The  $\psi$ -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**

Cavity Insulation	Inner leaf blockwork					
	Ultra lightweight		Lightweight		Dense	
	$\psi$ -value W/mK*	f-value	$\psi$ -value W/mK*	f-value	$\psi$ -value W/mK*	f-value
100mm $\lambda=0.037$	0.196	0.912	0.195	0.912	0.195	0.912
100mm $\lambda=0.032$	0.197	0.911	0.196	0.911	0.196	0.911
150mm $\lambda=0.037$	0.201	0.909	0.200	0.909	0.200	0.909
150mm $\lambda=0.032$	0.201	0.908	0.200	0.908	0.201	0.908

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

Cavity Insulation	Inner leaf blockwork					
	Ultra lightweight		Lightweight		Dense	
	$\psi$ -value W/mK*	f-value	$\psi$ -value W/mK*	f-value	$\psi$ -value W/mK*	f-value
100mm $\lambda=0.037$	0.205	0.918	0.203	0.918	0.203	0.918
100mm $\lambda=0.032$	0.206	0.917	0.205	0.917	0.205	0.917
150mm $\lambda=0.037$	0.210	0.915	0.209	0.915	0.209	0.915
150mm $\lambda=0.032$	0.210	0.914	0.209	0.914	0.210	0.914

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 m<sup>2</sup>K/W installed at the edge of the screed

**Signed:**

**Site manager/supervisor.....**

**Site name.....**

**Plot number.....**

**Date.....**