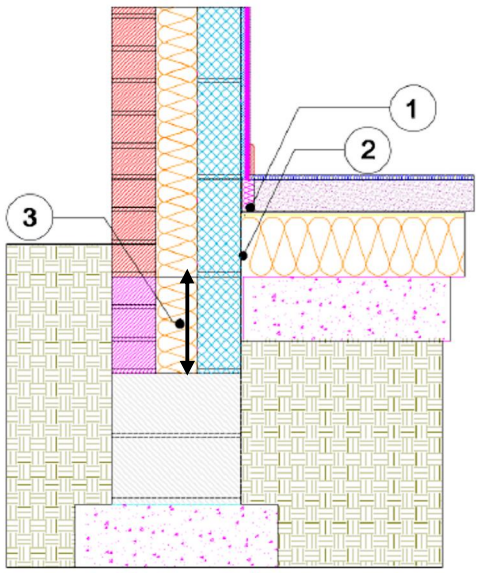
CONCRETE BLOCK ASSOCIATION	**Linear Thermal Transmittance (ψ-value)** **Temperature Factor (f-value)**	GCU Glasgow Caledonian University

Certificate No: CBA- 302	**Issued : August 2014**
Issued by Concrete Block Association	

Ground Floor, Insulation above slab – External wall Table K.1 Ref E5 Approved ɣ -value = 0.16 W/mK	Inner leaf	100 mm blockwork
	Cavity	Full fill insulation, see tables for options
	Outer leaf	102 mm Brick ə= 0.77
	Floor	100mm slab with 100 mm floor insulation ə= 0.022 Below a 75mm screed

Key Points

1. The R-value of the perimeter insulation should be at least 0.8m²K/W
2. Ensure the floor insulation is tightly butted against the external wall.
3. Continue the cavity insulation at least 225mm below the top of the concrete.



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 with 100mm floor insulation
λ=0.022, and cavity Insulation as highlighted

	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 ə=0.037	**0.060**	0.919	**0.097**	0.907	**0.159**	0.884
100mm ə=0.032	**0.059**	0.921	**0.097**	0.911	**0.160**	0.888
150mm ə=0.037	**0.058**	0.925	**0.097**	0.914	**0.162**	0.894
150mm ə=0.032	**0.057**	0.927	**0.097**	0.916	**0.164**	0.897

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

On-site Checklist

- Perimeter insulation with a resistance of at least 0.8 W/m^{2}K installed ☐
- Floor insulation is tightly butted against the external wall ☐
- Cavity insulation continues at least 225mm below the top of the concrete ☐

Site manager/supervisor……..

Site name……..

Plot number……

Date……