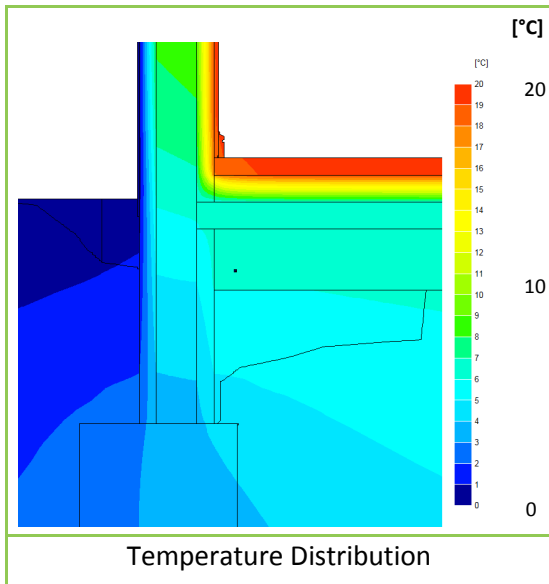
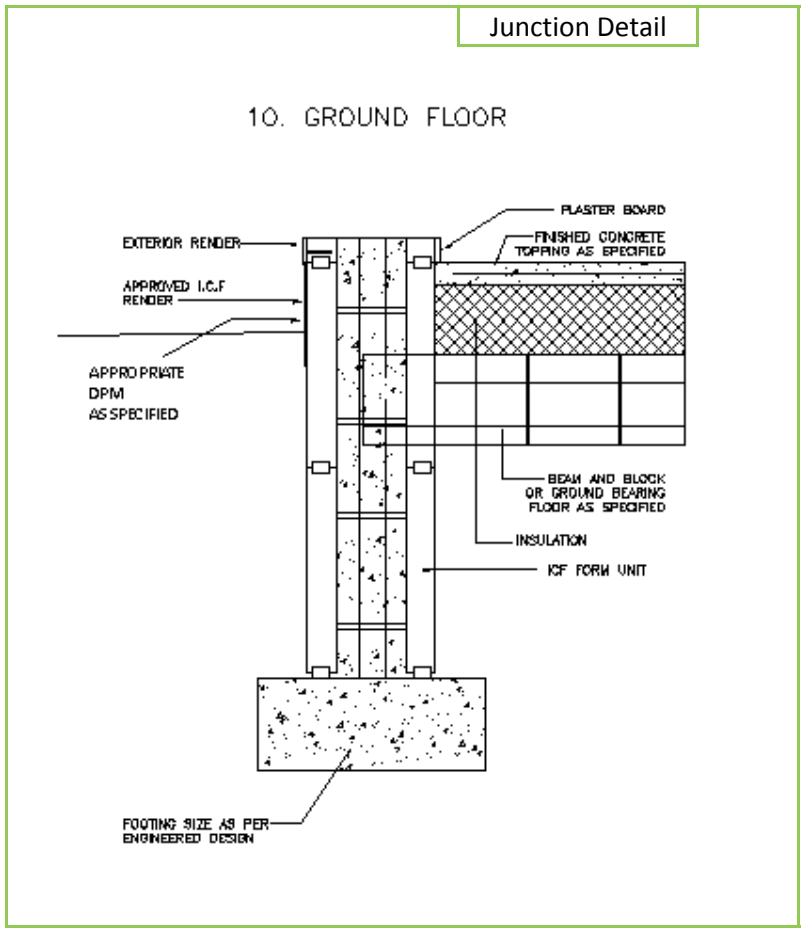


# Linear Thermal Transmittance ( $\Psi$ ) and Temperature Factor ( $f$ )

**Certificate No:** C4TM – 000364      **Issued:** Monday 15 November 2010

**Issued to: UK ICFA**  
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<b>General Construction Specification:</b> (see detail below for full construction)	Main/Load-bearing:	150mm (nominal) Dense Concrete Core, $\lambda \leq 2.00$
	Insulation:	2 layers of EPS, each with R value $\Rightarrow 1.805\text{m}^2\text{k/w}$ see note below
	Cavity:	15mm Cavity behind Brick if present
	Cladding:	9mm of Render OR 102mm Brick OR other Cladding
<b>Description:</b>	<b>ICF Wall, Ground Floor, Beam and Block or Ground Bearing Floor.</b>	
<b>Reference:</b>	<b>Ground Floor</b>	



**Linear Thermal Transmittance**  
**W/m.K**

**$\Psi =$       **0.067****

**Temperature Factor<sup>3</sup> for Humidity and Mould**

**$f =$       **0.921****

**Calculation Prepared By:** Matthew Wright MA Physics (Oxon) PGCE

- Notes: -**
- $\Psi$  and  $f$  are only valid for the detail drawn and described above.
  - These calculations apply to ICF forms with a minimum R value for the internal insulation layer (including embedded webs/fixing strips) of  $1.805\text{m}^2\text{k/w}$  or greater, (e.g. 65mm of EPS with a  $\lambda$  value of 0.036), and where the external layer of insulation has an equal or greater R Value.
  - U-values for the flanking walls are  $U \leq 0.255 \text{ W/m}^2\text{.K}$ .
  - In dwellings, a temperature factor  $f$  that is  $>0.75$  would avoid the risk of mould growth.
  - Calculations have been performed in accordance with:
    - EN ISO 10211\_2007 (British Standards)
    - IP 1/06 & BR497 (BRE Press)
 and with reference to the following publications:
    - EN ISO 6946 (British Standards)
    - BR443 (BRE Press)