

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

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**Issued to:**  
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<b>General Construction Specification:</b> (see detail below for full construction)	Main/Load-bearing:	Cellular Aggregate Block, Starperformer
	Insulation:	100mm Mineral Wool, $\lambda=0.036$
	Cavity:	100mm Full fill Cavity
	Cladding:	102mm Brick, $\lambda=0.77$
<b>Description:</b>	<b>Party Wall</b>	
<b>Reference:</b>	<b>MCI-IW-01</b>	

**Junction Detail**

Accredited (Indicative) Detail Number: MCI-IW-01

Besblock "Star Performer" cellular blockwork cavity masonry wall with render and gypsum based board on dabs

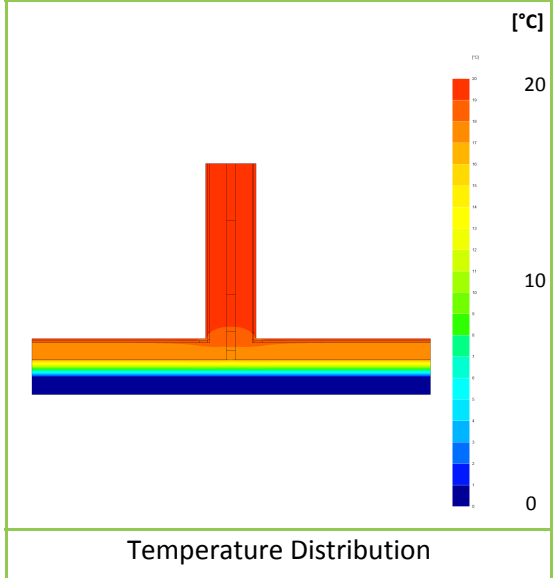
"Star Performer" block

12.5mm gypsum based board (minimum 8 kg/m<sup>2</sup>) mounted on dabs

Nominal 8mm (min 6mm) internal render, scratch finished

Besblock "Star Performer" cellular block

75mm  
275mm minimum



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

**$\Psi =$       **0.096****

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

**$f =$       **0.953****

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

- Notes: -**
- $\Psi$  and  $f$  are only valid for the detail drawn and described above.
  - U-values for the flanking walls are in the range  $U = 0.29 \text{ W/m}^2\text{.K}$ , or less.
  - 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)