



**Linear Thermal Transmittance ( $\psi$ -value) PSI Value**  
**Temperature Factor (f-value)**



**Certificate No: CBA-XT-CT-003**      **Issued : August 2014**  
**Issued by Concrete Block Association**

<b>Window sill</b> Table K.1 Ref E3 Approved $\psi$ -value = 0.04 W/mK	Inner leaf	100 mm blockwork
	Cavity	CavityTherm by Xtratherm, see table for options
	Outer leaf	102 mm Brick = 0.77

<p><b>Key Points</b></p> <ol style="list-style-type: none"> <li><b>1. Minimum frame overlap to be 30mm</b></li> <li><b>2. Close the cavity with insulation with <math>\lambda \leq 0.026</math></b></li> </ol>	
--	--

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

Calculation prepared by : Xtratherm UK Limited

Calculated  $\psi$ -values and f-values for window sill detail, and **cavity insulation** as highlighted

	Inner leaf blockwork					
	Ultra lightweight		Lightweight		Dense	
<b>Cavity Insulation</b> ↓	$\psi$ -value W/mK	f-value	$\psi$ -value W/mK	f-value	$\psi$ -value W/mK	f-value
100mm CT-PIR	<b>0.032</b>	0.848	<b>0.032</b>	0.848	<b>0.032</b>	0.849
125mm CT-PIR	<b>0.034</b>	0.845	<b>0.034</b>	0.845	<b>0.034</b>	0.845
150mm CT-PIR	<b>0.037</b>	0.843	<b>0.036</b>	0.843	<b>0.036</b>	0.843

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

NOTE: Because heat loss through windows and their frames is assessed separately, heat loss through the frame is not taken into account in the calculation of the  $\psi$ -value and f-value.

### On-site Checklist

- Frame overlap at least 30mm
- Cavity closed with insulation with  $\psi$  0.026

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

**Site name**.....

**Plot number**.....

**Date**.....