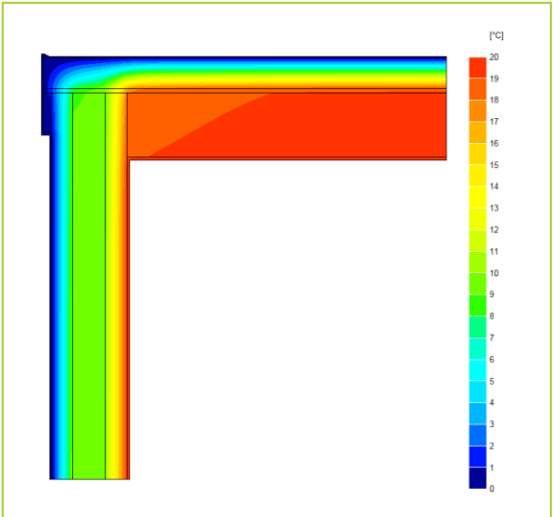
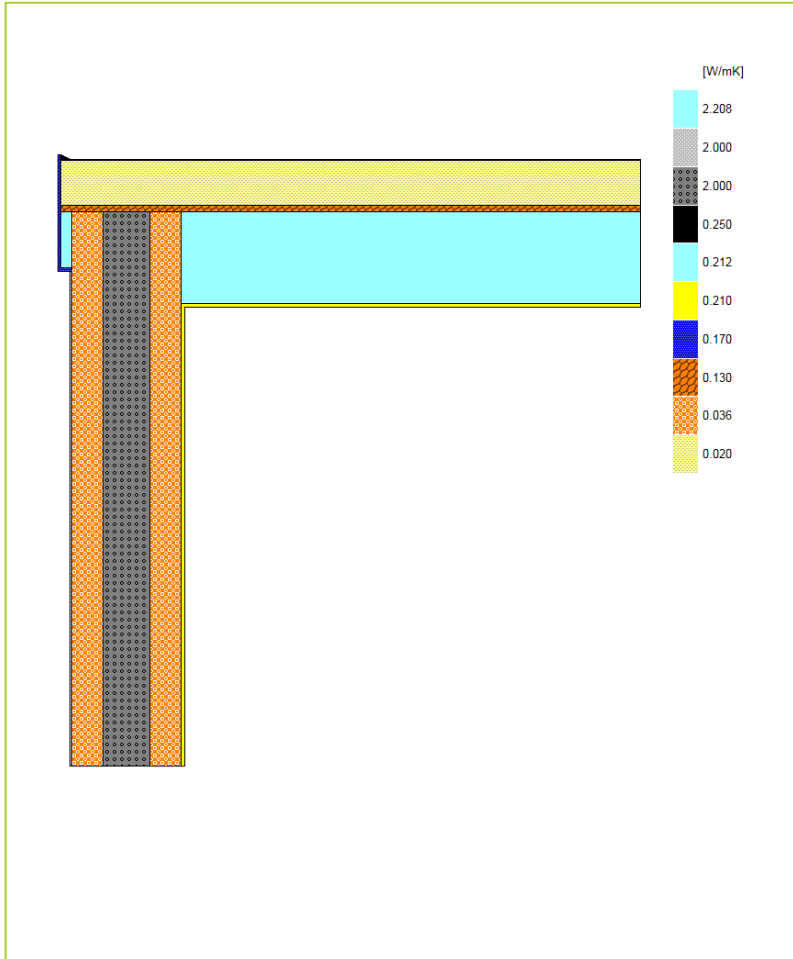


<b>Certificate No:</b>	<b>WRTM – 000088 vs. 0</b>	<b>Issued:</b>	<b>29 August 2019</b>
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Issued to: <i>Jean-Marc Bouvier</i>  <b>Nudura Corporation</b> International Sales & Field Support  Tel: Mob +44 (0) 7766 118711 Email: <a href="mailto:jmb@nudura.com">jmb@nudura.com</a> www.nudura.com	<b>General Construction Specification:</b> (see detail below for full construction)	Main/Load-bearing:	152mm (nominal) Dense Concrete Core, $\lambda \leq 2.50$
		Insulation:	2x 102mm layers of EPS, $\lambda = 0.036$
		Roof:	150mm PIR/PUR, $\lambda = 0.020$
			Cladding:
	<b>Description:</b>	<b>ICF Wall, Flat Roof, Minimum Roof U-value 0.13</b>	
	<b>Reference:</b>	<b>E14</b>	<b>Flat Roof + Wall</b>



Temperature Distribution

Linear Thermal Transmittance W/m.K	
<b><math>\Psi =</math></b>	<b>0.072</b>
Temperature Factor <sup>3</sup> for Humidity and Mould	
<b><math>f =</math></b>	<b>0.959</b>

Calculation Prepared By: **Trefor Jones**

- Notes:**
- $\Psi$  and  $f$  are only valid for the detail drawn and described above.
  - U-values are within the ranges of; for the flanking walls  $U = 0.16 \text{ W/m}^2.\text{K} \pm 10\%$  (external brick with cavity  $U = 0.159$ , thin render  $U = 0.167$ ); and for the flanking roof 0.13 or more.
  - In dwellings, a temperature factor  $f$  that is  $>0.75$  would avoid the risk of mould growth. For other nations, jurisdictions and climates, other standards may apply. E.g. 0.65; Switzerland: 0.75; Belgium: 0.7; Germany: 0.7; Finland: 0.87. French, German and other standards often do not indicate a single number for acceptable risk, but are dependent on circumstances.
  - 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)