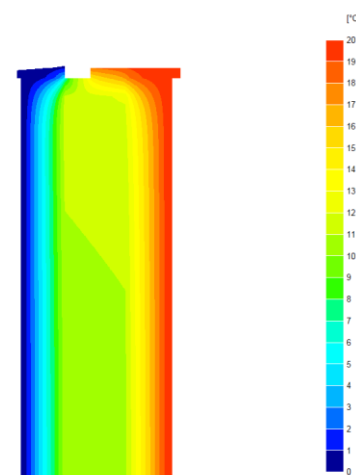
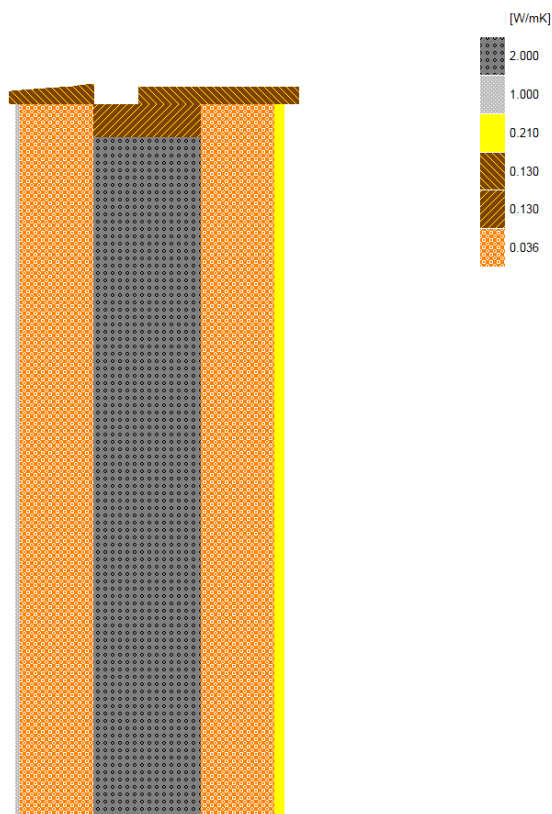


Certificate No:		WRTM – 000091 vs. 0 PHPP		Issued:		15 August 2019	
<div>Issued to: Jean-Marc Bouvier</div> <div>Nudura Corporation</div> <div>International Sales & Field Support</div> <div>Tel: Mob +44 (0) 7766 118711</div> <div>Email: jmb@nudura.com</div> <div>www.nudura.com</div>		<div>General Construction Specification:</div> <div>(see detail below for full construction)</div>	Main/Load-bearing:	152mm (nominal) Dense Concrete Core, $\lambda \leq 2.50$			
			Insulation:	2x 102mm layers of EPS, $\lambda = 0.036$			
			Cavity:	15mm Cavity behind Brick if present			
			Cladding:	9mm of Render OR 102mm Brick OR other Cladding			
		Description:	ICF Wall, Cill, timber reveal closure				
Reference:	E3	Cill, Standard Wall					



Temperature Distribution

Linear Thermal Transmittance
W/m.K

$\Psi = 0.045$

Temperature Factor³ for Humidity and Mould

$f = 0.902$

Calculation Prepared By: **Trefor Jones**

Notes: Calculated only for the calculations of passive houses (PassivHaus, PHPP), not to be used with the UK construction regulations and SAP calculations. Party values are per dwelling, that is, they have already been halved.

1. Ψ and f are only valid for the detail drawn and described above.

2. The Ψ and f quoted are considered valid for U-value(s) Wall $U = 0.16 \text{ W/m}^2.\text{K} \pm 10\%$ (external brick with cavity $U = 0.159$, thin render $U = 0.167$), (allowance of $\pm 20\%$, following the present guidance from B. Anderson, BRE, correspondence dated 24/02/2012, for the UK market). The use of different claddings may affect the U-value slightly, but will have no material impact on the calculated values used here, in this case.

3. In dwellings, UK regulations stipulate that a temperature factor, f , that is >0.75 would avoid the risk of mould growth.

For other nations, jurisdictions and climates, please consult the local building regulations that apply for avoiding mould and condensation.

(For example, typical requirements may be: Netherlands: 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.)

4. 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)