

UVALUE CALCULATION

Users Ref: BD/DUET/SF40/UNDER

Issued on: 17.September.2009

Prop Type Ref:

Property:

Carbon Index: 0.0

SAP Rating: 0

Fuel Bill: £0.00

CO2 Emissions: 0.00 t/year

Energy used: 0.0 GJ per annum

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Address: Blackpole, Lewth Lane, Woodplumpton, Preston

Client: BDL001, Boulder Developments Ltd, Norwell, Nottinghamshire, NG23 6JN, Tel: 01636 636 348, Fax: 01636 832 909

Software

SAP version: 0.00 Regs Region: England and Wales, Calculation Type: New Build

Calculation method: BS EN ISO 6946, BS EN ISO 13370, BS 5250

Building Elements:

Building Element Roof 1

Roof Type: Pitched Roof, insulated sloping ceiling

Layer	Description	Thickness	λ	R	Fraction
External surface				0.100	
Layer1	Tiling / Slate				
	Main construction	15 mm	1.000	0.000	100.00 %
Layer2	airspace/timber battens				
	Main construction	22 mm	0.220	0.000	89.63 %
	Corrections - Cavity Ventilated, Emissivity: Normal				
	Bridging - Timber	22 mm	0.130	0.000	10.37 %
Layer3	Breather membrane				
	Main construction	1 mm	0.000	0.000	100.00 %
Layer4	Rafter				
	Main construction	100 mm	0.000	0.000	100.00 %
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Layer5	SF40 Super Foil				
	Main construction	60 mm	0.017	3.564	100.00 %
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Layer6	Airspace / timber battens				
	Main construction	25 mm	0.000	0.000	100.00 %
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Layer7	SF40 Super Foil				
	Main construction	60 mm	0.017	3.564	100.00 %
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Layer8	airspace / timber battens				
	Main construction	25 mm	0.000	0.000	100.00 %
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Layer9	Vapour control layer under rafter				
	Main construction	1 mm	0.000	0.000	100.00 %
Layer10	airspace/timber battens				
	Main construction	22 mm	0.065	0.339	89.63 %
	Corrections - Cavity Unventilated, Emissivity: Low 0.2				
	Bridging - Timber	22 mm	0.130	0.000	10.37 %
Layer11	12.5mm Gyproc Wallboard				
	Main construction	13 mm	0.190	0.066	100.00 %
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Internal surface				0.100	
Total resistance:		Upper limit = 7.715 m ² K/W Lower limit = 7.701 m ² K/W Average = 7.708 m ² K/W			
		U-value (unrounded) = 0.1297 W/m ² K			

Unheated space: None

Total thickness: 343 mm

U-value: 0.13 W/m²K