

U-VALUE CALCULATOR REPORT

Property Reference	21124	Issued on Date	20/12/2021
Assessment Reference		Prop Type Ref	u-values
Project	Re-Purposed PIR Insulation		
Calculation Type	Conversion (As Designed)		

SAP Rating		DER		TER	
Environmental		% DER<TER			
CO ₂ Emissions (t/year)		DFEE		TFEE	
General Requirements Compliance		% DFEE<TFEE			

Assessor Details	Mrs. Susan Fox, SF Energy Limited, Tel: 07825 631518, suzi@sfenergy.co.uk	Assessor ID	C358-0001
Client	MAC Architects, M151		

Building Elements

Wall Block Render Wall column A - 130mm + 50mm Repurposed PIR

Wall Type: Standard Wall

Layer	Description	Thickness (mm)	Conductivity (W/m ² K)	Resistance (m ² K/W)	Fraction (%)
Ext surface				0.0400	
Layer 1	Render Main construction	20	1.0000	0.0200	100.00
Layer 2	Blockwork Main construction	100	1.5900	0.0629	100.00
Layer 3	ventilated cavity Main construction Corrections - Cavity Slightly ventilated, Openings Area: 1000 mm, Emissivity: Normal	50	0.5556	0.0900	100.00
Layer 4	Proctor Frameshield 100 Main construction	0.5	0.0000	0.0000	100.00
Layer 5	Orientated Strand Board Main construction	9	0.1300	0.0692	100.00
Layer 6	KR Cladding Repurposed PIR / studs Main construction Main construction Corrections - Air Gap: Level 1, Fasteners: None or plastic	130 130	0.0310 0.1300	4.1935 1.0000	85.00 15.00
Layer 7	airspace / studs Main construction Main construction Corrections - Cavity Unventilated, Emissivity: Normal	15 15	0.1364 0.1300	0.1100 0.1154	85.00 15.00
Layer 8	KR Cladding Repurposed PIR Main construction Corrections - Air Gap: Level 0, Fasteners: None or plastic	50	0.0310	1.6129	100.00
Layer 9	Reflectatherm Main construction	0.5	0.0000	0.0000	100.00
Layer 10	service void Main construction Main construction Corrections - Cavity Unventilated, Emissivity: Normal	35 35	0.0449 0.1300	0.7800 0.2692	92.17 7.83
Layer 11	Plasterboard, standard Main construction	12.5	0.2100	0.0595	100.00
Int surface				0.1300	

