

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 Granite 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	Reclaimed Granite				
	Main construction	100	2.8000	0.0357	100.00
Layer 2	Bituminous DPM				
	Main construction	1	0.5000	0.0020	100.00
Layer 3	ventilated cavity				
	Main construction	50	0.5556	0.0900	100.00
	Corrections - Cavity Slightly ventilated, Openings Area: 1000 mm, Emissivity: Normal				
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	130	0.0310	4.1935	85.00
	Main construction	130	0.1300	1.0000	15.00
	Corrections - Air Gap: Level 1, Fasteners: None or plastic				
Layer 7	airspace / studs				
	Main construction	15	0.1364	0.1100	85.00
	Main construction	15	0.1300	0.1154	15.00
	Corrections - Cavity Unventilated, Emissivity: Normal				
Layer 8	KR Cladding Repurposed PIR				
	Main construction	50	0.0310	1.6129	100.00
	Corrections - Air Gap: Level 0, Fasteners: None or plastic				
Layer 9	Reflectatherm				
	Main construction	0.5	0.0000	0.0000	100.00
Layer 10	service void				
	Main construction	35	0.0449	0.7800	92.17
	Main construction	35	0.1300	0.2692	7.83
	Corrections - Cavity Unventilated, Emissivity: Normal				
Layer 11	Plasterboard, standard				
	Main construction	12.5	0.2100	0.0595	100.00
Int surface				0.1300	

