



IR Heating Case Study – Russell Payne & Co

Outline: System: 8x Micro Energy Solutions 600x600 **Controls:** Salus RT500RF

Russell Payne & Co provide accountancy, business consultancy and IT services to small and medium sized businesses. Based in Lincoln, their aim is to give a very high level of service to a small number of clients. Flixborough Eco Technologies have been advising Russell Payne and Co, working closely with Russell to offer energy saving technologies to not only save his practise money but also his clients. This allows the practise to offer more than just accountancy and also give advice to customers on energy spend



Being a relatively modern building, this plays host to a gas central heating system with standard radiators. Unfortunately, it has been troublesome and does not provide heat to the furthest parts of the building. Additionally, the reception area for receiving visitors is frequently used and heat would escape and take 10-15 minutes to build back up. Due to the success of the trial in the reception area and the back office, they have decided to go ahead with a full office roll out and to de-commission the gas boiler.





RUSSELL PAYNE & Co.

CHARTERED ACCOUNTANTS

A sincere commitment to growing your business



Performance Data:

Performance Calculation:

Calculation:														
		Length	x	Width	=	Area	x	Height	=	Volume	x	Power Demand	=	Output Needed
Pos	Room Name	m	x	m	=	m ²	x	m	=	m ³	x	Watt/m ²	=	Watt
														Qt. Output Elements
														Σ Output Elements
1	GF - Reception		x		=	14.7 m ²	x	2.59	=	38.0877 m ³	x	30	=	1143
			x		=	0 m ²	x		=	0 m ³	x	28	=	0
														3
														350
														1050
2	Office Area	2.97	x	4.77	=	14.1628 m ²	x	2.59	=	36.6957034 m ³	x	28	=	1027
			x		=	0 m ²	x		=	0 m ³	x	28	=	0
														3
														350
														1050
3			x		=	0 m ²	x		=	0 m ³	x	28	=	0
			x		=	0 m ²	x		=	0 m ³	x	28	=	0
														0
														0
Total:						m²					m³			Σ needed Watt
						29					75			2170
						m²					m³			Qt.
														6
														Σ Watt
														2100

Heating Cost Calculation:

Energy output at full load	2170	Watt	
Average power tariff	0.14	£	(depending on the local price)
Heating Cost per hour	0.304	£	
Average operating time per day	5	Hours	(depending on the average outdoor temperature)
Heating cost per day	1.519	£	
Average operating days per year	180	Days	(depending on region)
Heating costs per year	273.43	£	

