

vPanel Energy Saving Performance Compare with Brickwall

Electricity Price

0.2365 \$/kWh

Energy Efficiency Alternatives

Simulation Ref.	Simulation Description	Building Annual Energy Use																						
		LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECTION	PUMPS & AUX	VENT FANS	Total Building Energy Use	Total Building Energy Cost	Total Building Energy Cost/Area	Annual Energy Savings			Floor Area	Additional Cost of Variation	Electricity Saving	Cost Saving	Cost Saving per Area	Payback Period	Chiller Size	AC Load, ft ² /TR	Reduction in Chiller Size	
		kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	\$	\$/ft ²	Wall Area, ft ²	Wall Cost, \$/ft ²	Total Wall Cost, \$	ft ²	\$	kWh	\$	\$/ft ²	Years	TR		%	
SIM 01	9-in Brick + Plaster	104,499	112,553	0	193,385	37,586	64,158	73,447	585,627	138,501	2.669	21,008	0.800	16,806	51,887	-	-	-	-	-	-	153.8	337.3	
SIM 02	vPanel 100 mm	104,499	112,553	0	185,491	35,255	58,772	72,249	568,820	134,526	2.593	21,008	1.376	28,914	51,887	12,108	16,807	3,975	0.077	3.0	140.9	368.2	8.4%	
SIM 02	vPanel 150 mm	104,499	112,553	0	181,322	34,004	55,917	71,698	559,994	132,439	2.552	21,008	2.271	47,708	51,887	30,902	25,633	6,062	0.117	5.1	134.1	387.0	12.8%	
SIM 04	vPanel 200 mm	104,499	112,553	0	179,093	33,327	54,393	71,416	555,282	131,324	2.531	21,008	2.959	62,165	51,887	45,359	30,345	7,177	0.138	6.3	130.4	397.9	15.2%	
SIM 05	vPanel 250 mm	104,499	112,553	0	177,726	32,913	53,461	71,245	552,398	130,642	2.518	21,008	3.647	76,622	51,887	59,816	33,229	7,859	0.151	7.6	128.3	404.6	16.6%	