

Wall U-Values - Celcon Storey Height Elements

TSD 04 (VE)

U-value calculations in accordance with BS EN ISO 6946 and BRE Conventions for U-value Calculations, BR443



Brick + Insulated Cavity + 100mm Celcon Element inner leaf

		U-Value (W/m ² K)						
		Cavity Insulation conductivity (W/mK)	Insulation thickness (mm)					
			50	75	100	125	150	200
Full fill	0.037 e.g. Dritherm 37 Standard			0.27	0.22	0.20	0.15	
	0.034 e.g. Dritherm 34 Super			0.25	0.21	0.18	0.14	
	0.032 e.g. Dritherm 32 Ultimate			0.24	0.20	0.17	0.14	
	0.022* e.g. Recticel Eurowall +			0.18	0.15	0.13		
	0.018* e.g. Kooltherm K106			0.16	0.13	0.11		
Partial fill	0.030 (Foil faced, grey EPS) e.g. Alreflex Platinum	0.29	0.23	0.20	0.17	0.15		
	0.022 (Foil faced PIR) e.g. Kingspan TW50	0.25	0.19	0.16	0.13	0.12		
	0.018 (Foil faced phenolic) e.g. Kingspan K108	0.22	0.17	0.14	0.12	0.10		

* Thickness includes insulation + 10mm design gap

Above figures are for plasterboard on dabs internal finishes, other finishes will be similar, consult Technical Services for specific values
Insulation products named correct at time of issue. All thicknesses shown may not be available for each product but have been included for comparison purposes.