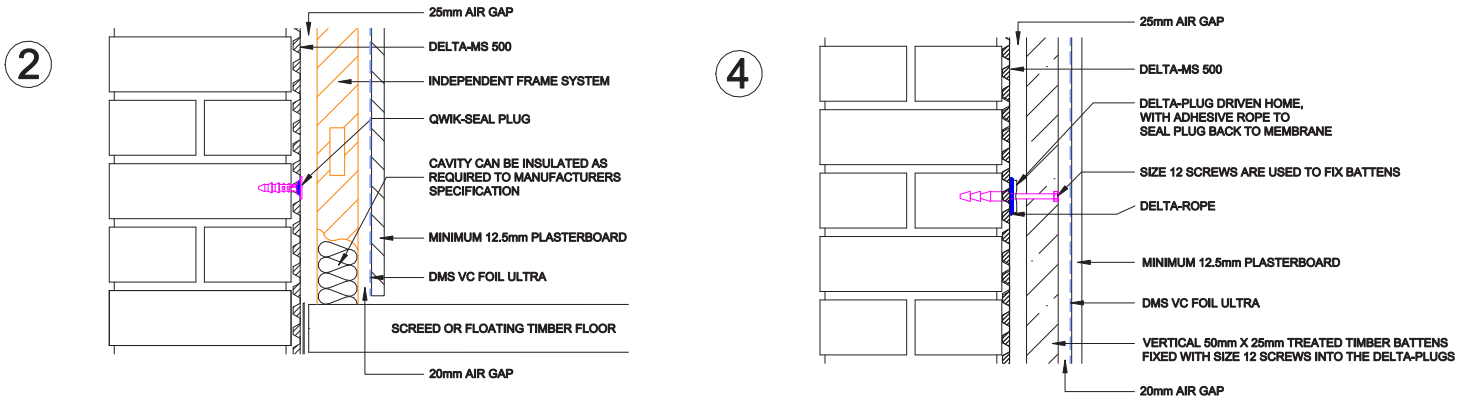


U-Value Calculations: 100mm PIR



Element type: Basement Wall – Delta Membranes

Calculation Method: BS EN ISO 6946

Drawing Reference: DW-507-1

U-Value Calculation: 100mm PIR

Layer	d (mm)	layer	bridge	Fraction	R layer	R bridge	Description
					0.130		Rsi
1	12.5	0.210			0.060		Plasterboard
2	20	R-value	0.120	0.0800	0.780	0.167	20mm x 25mm counterbatten
3							Protect VC Foil Ultra
4	100	0.022	0.120	0.150	4.545	0.833	PIR insulation / timber studs
5	25	R-value	0.120	0.150	0.440	0.208	25mm cavity low-E (0.2)
6	0.6	R-value			0.120		Delta MS-500
7	220	0.770			0.286		Solid brickwork
					0.040		Rse
	<u>378 mm</u> (total wall thickness)				6.401		

Total resistance: Upper limit: 5.086 Lower limit: 4.340 Ratio: 1.172 Average: 4.713
m²K/W

U-value (uncorrected) 0.212

U-value corrections

Air gaps in layer 4 U = 0.005 (Level 1)

Total U 0.005

U-value (corrected) 0.217

U-value (rounded) 0.22 W/m²K