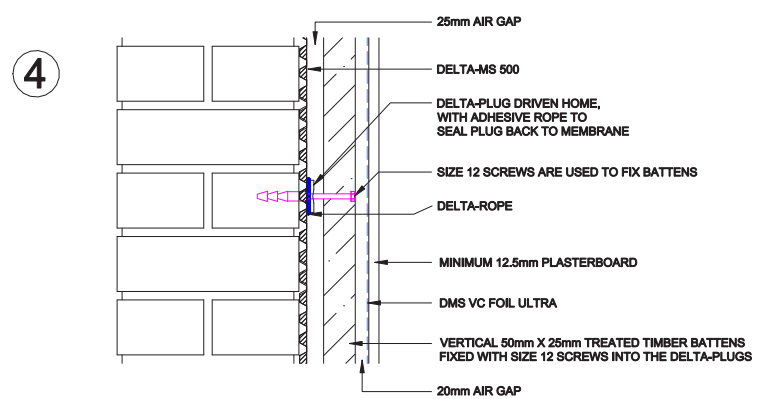
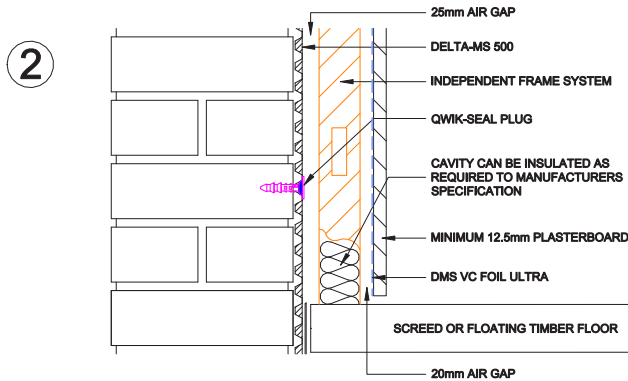


U-Value Calculation: 50mm PIR



Element type: Basement Wall – Delta Membranes

Calculation Method: BS EN ISO 6946

Drawing Reference: DW-507-1

U-Value Calculation: 50mm PIR

Layer	d (mm)	layer	bridge	Fraction	R layer	R bridge	Description
					0.130		R _{si}
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	50	0.022	0.120	0.150	2.273	0.417	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
					<u>0.040</u>		R _{se}
	<u>328 mm</u>	(total wall thickness)			<u>4.128</u>		

Total resistance: Upper limit: 3.511 Lower limit: 2.977 Ratio: 1.179 Average: 3.244 m²K/W

U-value (uncorrected) 0.308

U-value corrections

Air gaps in layer 4 U = 0.003 (Level 1)

Total U 0.003

U-value (corrected) 0.311

U-value (rounded) 0.31 W/m²K