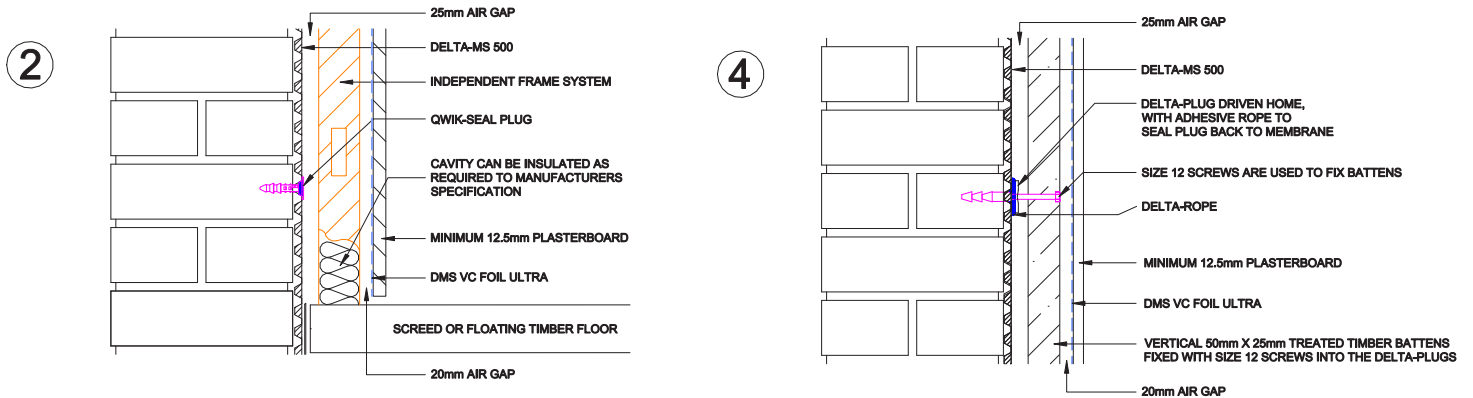


U-Value Calculation: 50mm PIR with TF InterFoil



Element type: Basement Wall – Delta Membranes

Drawing Reference: DW-507-1

U-Value Calculation: 50mm PIR with TF InterFoil

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	50	0.022	0.120	0.150	2.273	0.417	PIR insulation / timber studs
5							Protect TF Interfoil
6	25	R-value	0.120	0.150	0.770	0.208	25mm cavity unventilated
low-E							
7	0.6	R-value			0.120		Delta MS-500
8	220	0.770			0.286		Solid brickwork
					<u>0.040</u>		Rse
					<u>328 mm</u>	<u>4.458</u>	(total wall thickness)

Total resistance: Upper limit: 3.861 Lower limit: 3.149 Ratio: 1.226 Average: 3.505
m²K/W

U-value (uncorrected) 0.285

U-value corrections

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

Total U 0.003

U-value (corrected) 0.288

U-value (rounded) 0.29 W/m²K