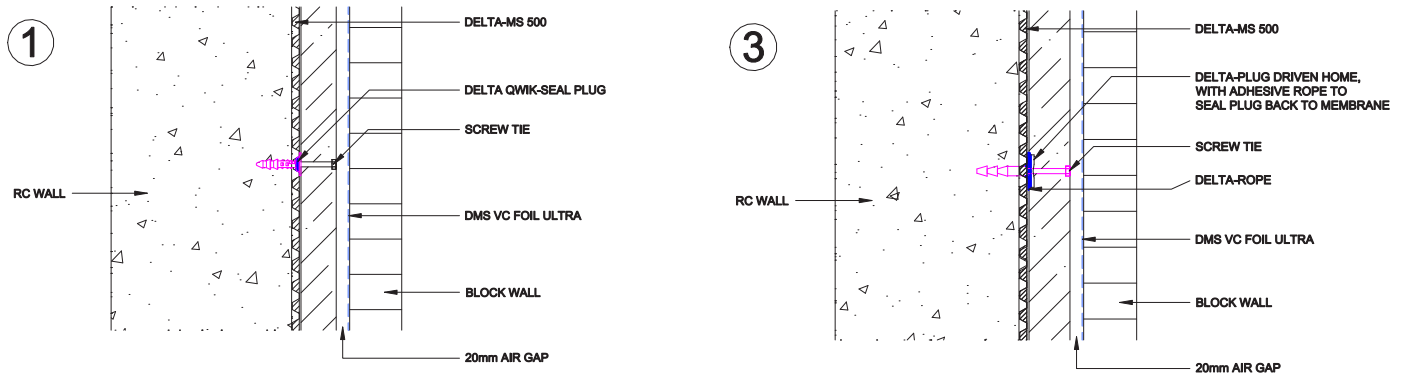


U-Value Calculation: 50mm PIR Reinforced concrete



Element type: Basement Wall – Delta Membranes

Calculation Method: BS EN ISO 6946

Drawing Reference: DW-508-1

U-Value Calculation 50mm PIR Reinforced concrete

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	0.6	R-value			0.120		Delta MS-500
6	250	2.300			0.109		Reinforced concrete
					0.040		Rse
<u>333 mm</u> (total wall thickness)					3.511		

Total resistance: Upper limit: 2.932 Lower limit: 2.423 Ratio: 1.210 Average: 2.677
m²K/W

U-value (uncorrected) 0.3735

U-value corrections

Air gaps in layer 4 U = 0.0042 (Level 1)

Total U 0.0042

U-value (corrected) 0.378

U-value (rounded) 0.38 W/m²K