

WALL TYPE 01 Build-up (Cavity Wall)

Layer	Thickness (mm)	Conductivity (W/m.K)	Resistance (m2K/W)
Internal surface	-	-	0.130
Internal finish	25	0.210	0.120
Cavity	50	-	0.180
PIR insulation	150	0.022	6.818
OSB	15	0.130	0.115
Cavity	25	-	0.090
Outer leaf	103	0.770	0.134
External surface	-	-	0.040
Total thickness	368		7.627

WALL TYPE 02 Build-up (Cavity wall + Timber weatherboard cladding)

Summary of U-value calculation			
Layer	Thickness (mm)	Conductivity (W/m.K)	Resistance (m2K/W)
Internal surface	-	-	0.130
Internal finish	25	0.210	0.120
Cavity	50	-	0.180
PIR insulation	150	0.022	6.818
OSB	15	0.130	0.115
Cladding	20	0.212	0.094
External surface	-	-	0.040
Total thickness	360		7.497

ROOF TYPE 01 Build-up (ventilated tiled Warm Roof)

Summary of U-value calculation			
Layer	Thickness (mm)	Conductivity (W/m.K)	Resistance (m ² K/W)
External surface	-	-	0.040
Ventilation void	-	-	-
PIR Insulation btw. Rafters	200	0.022	9.091
Timber battens / void	50	-	-
Plasterboard	25	0.210	0.120
Internal surface	-	-	0.100
Total thickness	370		9.351

ROOF TYPE 02 Build-up (Flat roof)

Layer	Thickness (mm)	Conductivity (W/m.K)	Resistance (m ² K/W)
PVC membrane	3		0.040
Plywood	15	0.13	0.115
Timber battens / void	50		
Insulation	150	0.022	6.818
Plasterboard	25	0.19	0.13
Internal surface		-	0.130
Total thickness	296		7.233

FLOOR TYPE 01

Summary of U-value calculation			
Layer	Thickness (mm)	Conductivity (W/m.K)	Resistance (m2K/W)
Rsi	-	-	0.170
Flooring	20	-	-
Screed	70	0.70	0.100
Insulation	140	0.022	6.363
Block	155	0.45	0.258
Rse (Void)	-	-	0.130
Total thickness	385	-	7.021

Drwg No: **2011-B-05** Rev:

