

DATA SHEET D.1.3

THERMAL PROPERTIES OF WALLS

BUILDING PRODUCTS	U-VALUE m <sup>2</sup> .K/W	R-VALUE W/(m <sup>2</sup> K)
<b>BRICK</b>		
single skin, 105 mm	3.28	0.30
single skin, 220 mm	2.26	0.44
single skin, 335 mm	1.73	0.58
single skin, 105 mm plastered	3.02	0.33
single skin, 220 mm plastered	2.14	0.47
single skin, 335 mm plastered	1.79	0.56
cavity, 275 mm plastered	1.47	0.68
same, with 25 mm EPS in cavity	0.72	1.39
same, with 40 mm EPS in cavity	0.55	1.82
same, with 50 mm EPS in cavity	0.47	2.13
Brick 105, cavity, 100 Lw concr. Block, Lw plaster	0.92	1.09
same + 25 mm EPS	0.55	1.82
same but 50 mm EPS	0.40	2.50
Concr. Block solid 200, plasterboard	1.83	0.55
same, but foil-backed plasterboard	1.40	0.71
same, but cavity, 25 EPS, plasterboard	0.70	1.43
same, but lightweight concrete	0.69	1.45
same, but foil-backed plasterboard	0.61	1.64
same, but 25 mm cavity, 25 EPS, plasterboard	0.46	2.17
Concr. block hollow, 200 mm, ins. plasterboard	2.42	0.41
Concrete, dense, cast, 150 mm	3.48	0.29
same + 50 mm woodwool slab, plastered	1.23	0.81
same, but lightweight plaster	1.15	0.87
Concrete, dense, cast, 200 mm	3.10	0.32
same + 50 mm woodwool slab, plastered	1.18	0.85
same, but lightweight plaster	1.11	0.90
Concrete, precast panel, 75 mm	4.28	0.23
same + 25 mm EPS + plasterboard	0.84	1.19
Concrete, precast, 75 + 25 EPS + 150 Lw concr.	0.58	1.72
same, but 50 mm EPS	0.41	2.44

BUILDING PRODUCTS	U-VALUE m <sup>2</sup> .K/W	R-VALUE W/(m <sup>2</sup> K)
<b>BRICK / BLOCK VENEERS</b>		
Brick 105 + cavity (frame) + plasterboard	1.77	0.56
same, but foil-backed plasterboard	1.35	0.74
same with 25 mm EPS or glass fibre	0.78	1.28
same with 50 mm EPS or glass fibre	0.50	2.00
same, 25 EPS + foil-backed plasterboard	0.69	1.45
Block 100 + cavity (frame) + plasterboard	1.57	0.64
same, but foil-backed plasterboard	1.24	0.81
same with 25 mm EPS or glass fibre	0.74	1.35
same with 50 mm EPS or glass fibre	0.48	2.08
same, 25 mm EPS + foil-backed plasterboard	0.66	1.52