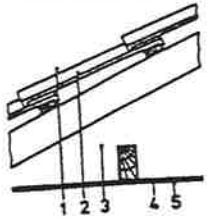
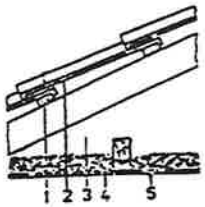
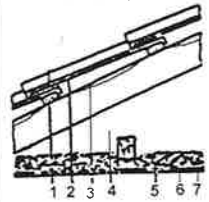
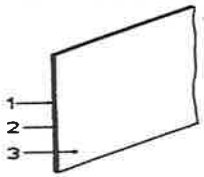
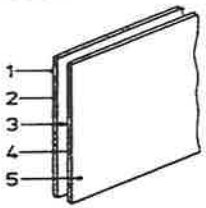
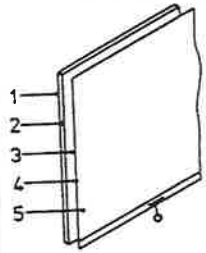
Pitched Roofs

Construction	Resistance, R (m².K/W) Heat flow Up (Winter)	Heat flow Down (Summer)	Capacitance, C (kJ/m².K)
TILED ROOF, GYPSUM BOARD			
			
1. Outdoor air film*	0.11	0.04	0
2. 19 mm tiles, clay, roofing	-	0.023	34
3. Roof ventilated space	-	0.46	0
4. 13 mm gypsum board	0.077	0.077	12
5. Indoor air film	0.11	0.16	0
Total resistance, R_T =	0.30	0.76	
$U = 1/R_T$ =	3.37	1.32 W/m².K	
TILED ROOF, R2 BULK INSULATION, GYPSUM BOARD			
			
1. Outdoor air film*	0.11	0.04	0
2. 19 mm tiles, clay, roofing	-	0.023	34
3. Roof ventilated space	-	0.46	0
R2 (90mm) glass fibre blanket	2	2	0
4. 13 mm gypsum board	0.077	0.077	12
5. Indoor air film	0.11	0.16	0
Total resistance, R_T =	2.30	2.76	
$U = 1/R_T$ =	0.44	0.36 W/m².K	
TILED ROOF, RFL, R2 BULK INSULATION, GYPSUM BOARD			
			
1. Outdoor air film*	0.11	0.04	0
2. 19 mm tiles, clay, roofing	-	0.023	34
3. RFL, bright side facing down	0	0	0
4. Roof ventilated space	0.34	1.36	0
5. R2 (90mm) glass fibre blanket	2	2	0
6. 13 mm gypsum board	0.077	0.077	12
7. Indoor air film	0.11	0.16	0
Total resistance, R_T =	2.64	3.66	
$U = 1/R_T$ =	0.38	0.27 W/m².K	

* For pitched roofs and winter conditions, the outdoor surface is assumed to be the upper surtace of the ceiling lining or bulk insulation for uninsulated and insulated roofs respectively, with the surtace resistance that for sfill air. Where reflective foil laminate is installed as a sarking, the upper surtace of the film is assumed to be the outdoor surface. Air movement is assumed above the sarking.

Windows

Construction	Resistance, R (m².K/W) Winter	Summer	Capacitance, C (kJ/m².K)
SINGLE GLASS			
			
1. Outdoor air film	0.03	0.04	0
2. 6 mm float glass	0.006	0.006	13
3. Indoor air film	0.12	0.12	0
Total resistance, R_T =	0.16	0.17	
$U = 1/R_T$ =	6.4	6.0 W/m².K	
DOUBLE GLASS			
			
1. Outdoor air film	0.03	0.04	0
2. 6 mm float glass	0.006	0.006	13
3. 12mm air space*	0.14	0.14	0
4. 6 mm float glass	0.006	0.006	13
5. Indoor air film	0.12	0.12	0
Total resistance, R_T =	0.30	0.31	
$U = 1/R_T$ =	3.3	3.2 W/m².K	
SINGLE GLASS, BLIND			
			
1. Outdoor air film	0.03	0.04	0
2. 6 mm float glass	0.006	0.006	13
3. 50mm air space*	0.16	0.16	0
4. Blind, close fit	0	0	0
3. Indoor air film	0.12	0.12	0
Total resistance, R_T =	0.32	0.33	
$U = 1/R_T$ =	3.2	3.1 W/m².K	

* Cavity assumed unventilated.