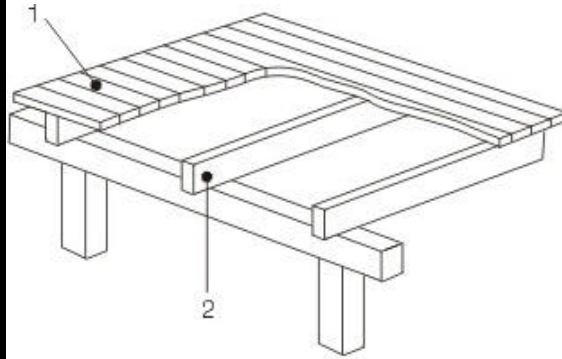


## PRESENTATION OF RESULTS

### Floors

R-values of suspended floor elements are calculated using a modified CIBSE Method (CIBSE Guide, 1986). Values are given for heat flow *DOWN* and *UP* that correspond to open and enclosed sub-floors with three ventilation conditions (see BCA, Table 3.4.1.2), two sub-floor heights and two soil conditions.

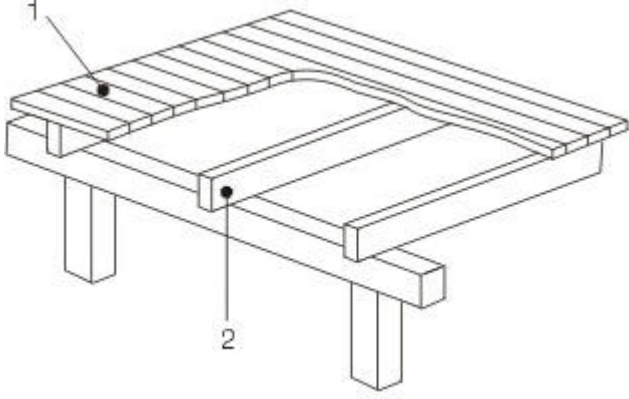
It should be noted that conditions different to the assumptions used in the calculations would result in different R-values.

Description of Element	Sub-Floor Ventilation High, Medium, Low [Zone3, Zone2, Zone1]* (Cold Weather)			Sub-Floor Ventilation High, Medium, Low [Zone3, Zone2, Zone1]* (Hot Weather)			
	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
 <p>1. 19mm timber floor 2. Timber floor joist</p> <p>Joists @ 450 or 600crs</p>	<b>Clay soil, sheltered location</b>						
	0.5m height	0.7	0.8	0.9	0.5	0.6	0.6
	2.5m height	0.7	0.7	0.8	0.5	0.5	0.5
	<b>Sand soil, sheltered location</b>						
	0.5m height	0.7	0.7	0.8	0.5	0.6	0.6
	2.5m height	0.7	0.7	0.7	0.5	0.5	0.5
	<b>Clay soil, exposed location</b>						
	0.5m height	0.7	0.7	0.8	0.5	0.5	0.5
	2.5m height	0.7	0.7	0.8	0.5	0.5	0.5
	<b>Sand soil, exposed location</b>						
	0.5m height	0.7	0.7	0.7	0.5	0.5	0.5
	2.5m height	0.7	0.7	0.7	0.5	0.5	0.5

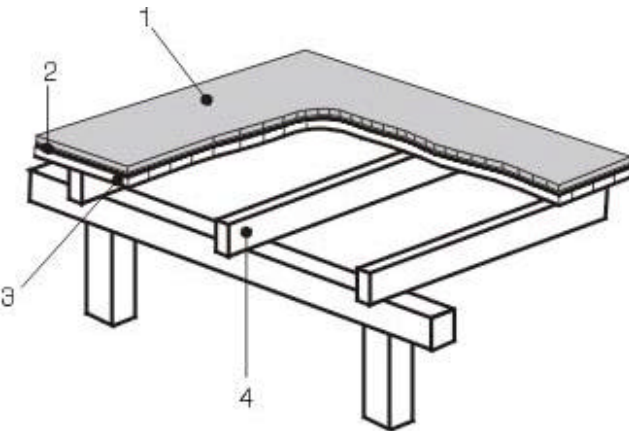
\* Zone3, Zone2 and Zone1 descriptions used with floor elements incorporating sub-floor walls only.

- Notes:
- 1) When the ground surface is sloping use the average under-floor height. For intermediate heights interpolate R-value between 0.5m and 2.5m.
  - 2) Sheltered location – heavy shielding from wind around building perimeter, Exposed location – no obstructions or local wind shielding.
  - 3) Heat flow **DOWN** means the heat flows *from* the internal spaces of the building.
  - 4) Heat flow **UP** means the heat flows *into* the internal spaces of the building.

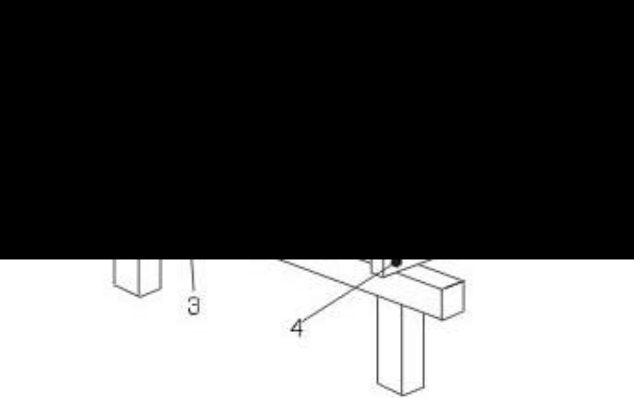
## F1. SUSPENDED FLOOR, BARE TIMBER, NO SUB-FLOOR WALLS

 <p>1. 19mm timber floor 2. Timber floor joist</p> <p>Joists @ 450 or 600 crs</p>	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	0.7	0.8	0.9	0.5	0.6	0.6
	2.5m height	0.7	0.7	0.8	0.5	0.5	0.5
<b>Sand soil, sheltered setting</b>	0.5m height	0.7	0.7	0.8	0.5	0.6	0.6
	2.5m height	0.7	0.7	0.7	0.5	0.5	0.5
<b>Clay soil, exposed setting</b>	0.5m height	0.7	0.7	0.8	0.5	0.5	0.5
	2.5m height	0.7	0.7	0.8	0.5	0.5	0.5
<b>Sand soil, exposed setting</b>	0.5m height	0.7	0.7	0.7	0.5	0.5	0.5
	2.5m height	0.7	0.7	0.7	0.5	0.5	0.5

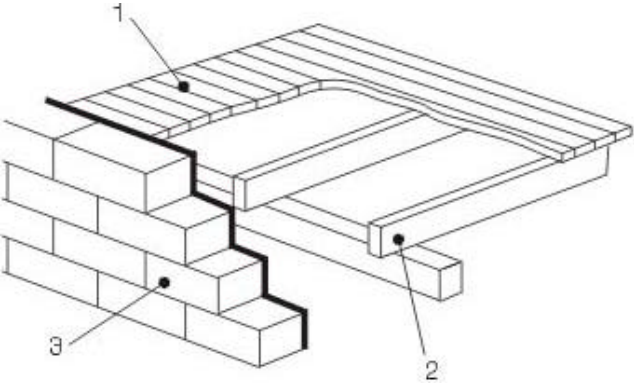
## F2. SUSPENDED FLOOR, CARPETED TIMBER, NO SUB-FLOOR WALLS

 <p>1. 12mm carpet 2. 10mm underlay 3. 19mm timber floor 4. Timber floor joist</p> <p>Joists @ 450 or 600 crs</p>	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	1.0	1.1	1.2	0.8	0.9	0.9
	2.5m height	1.0	1.0	1.1	0.8	0.8	0.8
<b>Sand soil, sheltered setting</b>	0.5m height	1.0	1.0	1.1	0.8	0.9	0.9
	2.5m height	1.0	1.0	1.0	0.8	0.8	0.8
<b>Clay soil, exposed setting</b>	0.5m height	1.0	1.0	1.1	0.8	0.8	0.8
	2.5m height	1.0	1.0	1.1	0.8	0.8	0.8
<b>Sand soil, exposed setting</b>	0.5m height	1.0	1.0	1.0	0.8	0.8	0.8
	2.5m height	1.0	1.0	1.0	0.8	0.8	0.8

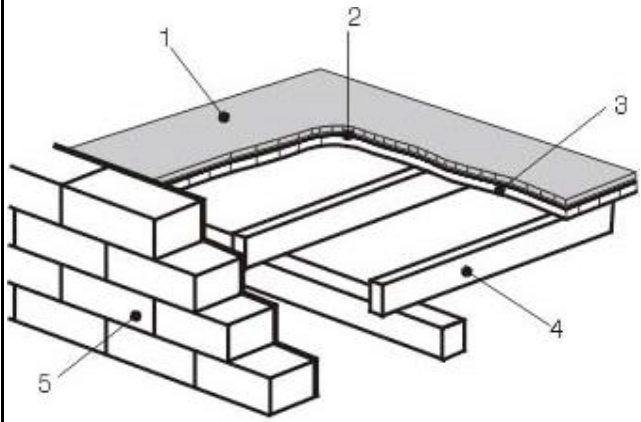
### F3. SUSPENDED FLOOR, TILED TIMBER, NO SUB-FLOOR WALLS

		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
 <p>1. 6mm tiles 2. Tile underlay 3. 19mm timber floor 4. Timber floor joist</p> <p>Joists @ 450 or 600 crs</p>	<b>Clay soil, sheltered setting</b>						
	0.5m height	0.8	0.8	0.9	0.5	0.6	0.6
	2.5m height	0.8	0.8	0.8	0.5	0.5	0.5
	<b>Sand soil, sheltered setting</b>						
	0.5m height	0.8	0.8	0.8	0.5	0.6	0.6
	2.5m height	0.8	0.8	0.8	0.5	0.5	0.5
	<b>Clay soil, exposed setting</b>						
	0.5m height	0.8	0.8	0.8	0.5	0.6	0.6
	2.5m height	0.8	0.8	0.8	0.5	0.5	0.5
	<b>Sand soil, exposed setting</b>						
	0.5m height	0.7	0.7	0.8	0.5	0.6	0.6
	2.5m height	0.8	0.8	0.8	0.5	0.5	0.5

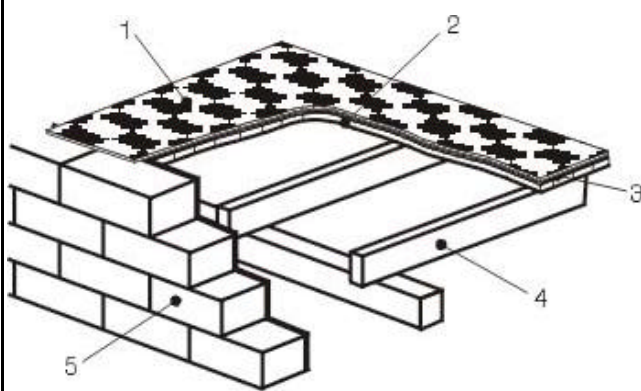
### F4. SUSPENDED FLOOR, BARE TIMBER, SUB-FLOOR WALLS

		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
 <p>1. 19mm timber floor 2. Timber floor joist 3. Sub-floor wall</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: Sub-floor wall may be any suitable material</p>	<b>Clay soil, sheltered setting</b>						
	0.5m height	1.5	1.6	1.8	1.3	1.3	1.6
	2.5m height	1.0	1.0	1.0	0.7	0.7	0.8
	<b>Sand soil, sheltered setting</b>						
	0.5m height	1.2	1.2	1.3	1.0	1.0	1.2
	2.5m height	0.9	0.9	0.9	0.7	0.7	0.7
	<b>Clay soil, exposed setting</b>						
	0.5m height	1.3	1.5	1.6	1.1	1.1	1.4
	2.5m height	1.0	1.0	1.0	0.7	0.7	0.8
	<b>Sand soil, exposed setting</b>						
	0.5m height	1.1	1.2	1.2	0.9	0.9	1.1
	2.5m height	0.9	0.9	0.9	0.7	0.7	0.7

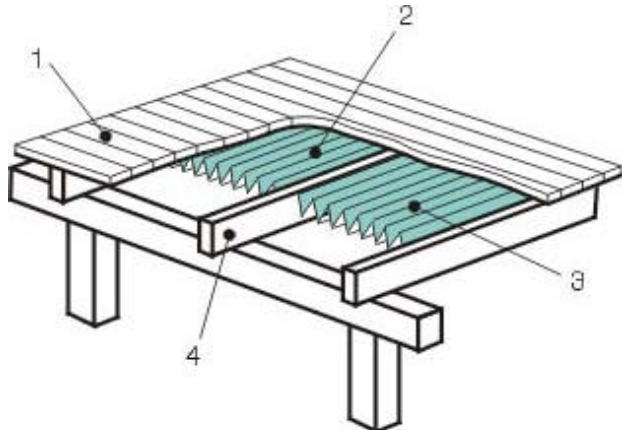
### F5. SUSPENDED FLOOR, CARPETED TIMBER, SUB-FLOOR WALLS

 <p>1. 12mm carpet 2. 10mm underlay 3. 19mm timber floor 4. Timber floor joist 5. Sub-floor wall</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: Sub-floor wall may be any suitable material</p>	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	1.8	1.9	2.1	1.6	1.6	1.9
	2.5m height	1.3	1.3	1.3	1.0	1.0	1.1
<b>Sand soil, sheltered setting</b>	0.5m height	1.5	1.5	1.6	1.3	1.3	1.5
	2.5m height	1.2	1.2	1.2	1.0	1.0	1.0
<b>Clay soil, exposed setting</b>	0.5m height	1.6	1.8	1.9	1.4	1.4	1.7
	2.5m height	1.3	1.3	1.3	1.0	1.0	1.1
<b>Sand soil, exposed setting</b>	0.5m height	1.4	1.5	1.5	1.2	1.2	1.4
	2.5m height	1.2	1.2	1.2	1.0	1.0	1.0

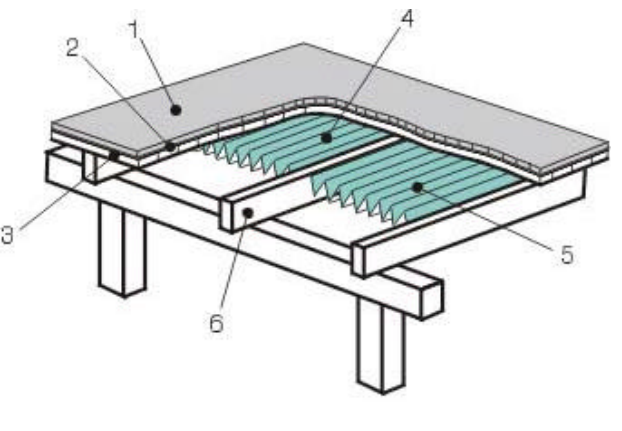
### F6. SUSPENDED FLOOR, TILED TIMBER, SUB-FLOOR WALLS

 <p>1. 6mm tiles 2. 19mm timber floor 3. Tile underlay 4. Timber floor joist 5. Sub-floor wall</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: Sub-floor wall may be any suitable material</p>	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	1.6	1.7	1.8	1.4	1.4	1.6
	2.5m height	1.0	1.1	1.1	0.8	0.8	0.8
<b>Sand soil, sheltered setting</b>	0.5m height	1.2	1.3	1.3	1.1	1.1	1.2
	2.5m height	0.9	1.0	1.0	0.7	0.7	0.8
<b>Clay soil, exposed setting</b>	0.5m height	1.4	1.5	1.7	1.2	1.2	1.5
	2.5m height	1.0	1.0	1.1	0.8	0.8	0.8
<b>Sand soil, exposed setting</b>	0.5m height	1.1	1.2	1.3	1.0	1.0	1.1
	2.5m height	0.9	0.9	1.0	0.7	0.7	0.7

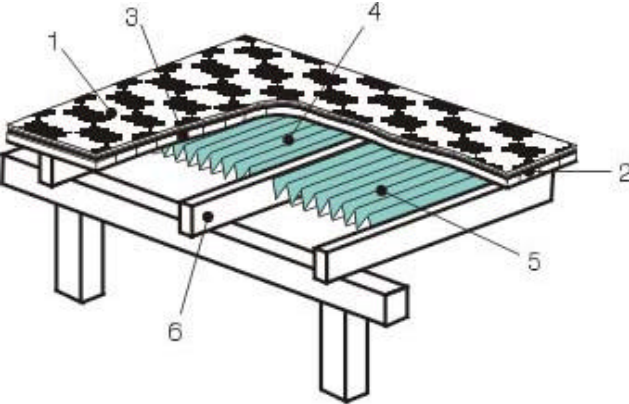
### F7. SUSPENDED FLOOR, BARE TIMBER, NO SUB-FLOOR WALLS, RFL BETWEEN JOISTS

 <p>1. 19mm timber floor 2. Air space (reflective) 3. RFL 4. Timber floor joist</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: RFL may be concertina as shown or sheet fixed to underside of joists.</p>		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>	0.5m height	1.1	1.1	1.2	0.7	0.8	0.8
	2.5m height	1.1	1.1	1.1	0.7	0.7	0.7
<b>Sand soil, sheltered setting</b>	0.5m height	1.1	1.1	1.2	0.7	0.8	0.8
	2.5m height	1.1	1.1	1.1	0.7	0.7	0.7
<b>Clay soil, exposed setting</b>	0.5m height	1.1	1.1	1.2	0.7	0.8	0.8
	2.5m height	1.1	1.1	1.1	0.7	0.7	0.7
<b>Sand soil, exposed setting</b>	0.5m height	1.1	1.1	1.1	0.7	0.7	0.7
	2.5m height	1.1	1.1	1.1	0.7	0.7	0.7

### F8. SUSPENDED FLOOR, CARPETED TIMBER, NO SUB-FLOOR WALLS, RFL BETWEEN JOISTS

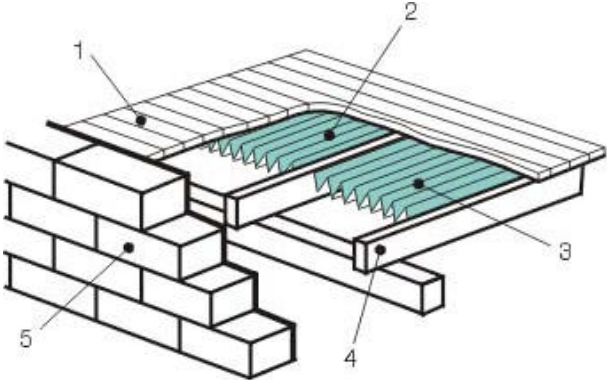
 <p>1. 12mm carpet 2. 10mm underlay 3. 19mm timber floor 4. Air space (reflective) 5. RFL 6. Timber floor joist</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: RFL may be concertina as shown or sheet fixed to underside of joists.</p>		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>	0.5m height	1.4	1.4	1.5	1.0	1.1	1.1
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0
<b>Sand soil, sheltered setting</b>	0.5m height	1.4	1.4	1.5	1.0	1.1	1.1
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0
<b>Clay soil, exposed setting</b>	0.5m height	1.4	1.4	1.4	1.0	1.0	1.0
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0
<b>Sand soil, exposed setting</b>	0.5m height	1.4	1.4	1.4	1.0	1.0	1.0
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0

### F9. SUSPENDED FLOOR, TILED TIMBER, NO SUB-FLOOR WALLS, RFL BETWEEN JOISTS

		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>	0.5m height	1.2	1.2	1.3	0.7	0.9	0.9
	2.5m height	1.2	1.2	1.2	0.7	0.8	0.8
<b>Sand soil, sheltered setting</b>	0.5m height	1.2	1.2	1.2	0.7	0.9	0.9
	2.5m height	1.2	1.2	1.2	0.7	0.8	0.8
<b>Clay soil, exposed setting</b>	0.5m height	1.1	1.2	1.2	0.7	0.8	0.8
	2.5m height	1.2	1.2	1.2	0.7	0.7	0.7
<b>Sand soil, exposed setting</b>	0.5m height	1.1	1.1	1.2	0.7	0.8	0.8
	2.5m height	1.1	1.2	1.2	0.7	0.7	0.7

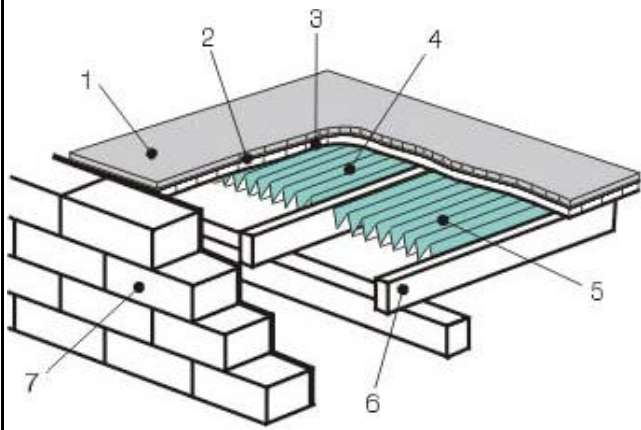
NOTE: RFL may be concertina as shown or sheet fixed to underside of joists.

### F10. SUSPENDED FLOOR, BARE TIMBER, SUB-FLOOR WALLS, RFL BETWEEN JOISTS

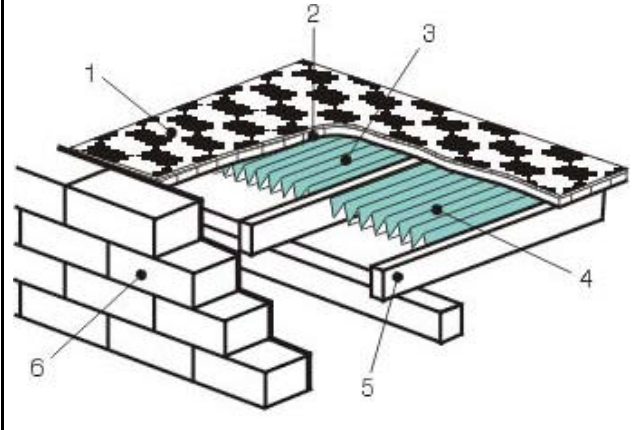
		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>	0.5m height	2.0	2.1	2.2	1.6	1.6	1.8
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0
<b>Sand soil, sheltered setting</b>	0.5m height	1.7	1.8	1.9	1.3	1.3	1.5
	2.5m height	1.3	1.4	1.4	0.9	0.9	1.0
<b>Clay soil, exposed setting</b>	0.5m height	1.8	1.9	2.1	1.4	1.4	1.7
	2.5m height	1.4	1.4	1.4	0.9	0.9	1.0
<b>Sand soil, exposed setting</b>	0.5m height	1.6	1.7	1.8	1.2	1.2	1.4
	2.5m height	1.3	1.3	1.4	0.9	0.9	0.9

NOTE: 1. RFL may be concertina as shown or sheet fixed to underside of joists.  
2. Sub-floor wall may be any suitable material

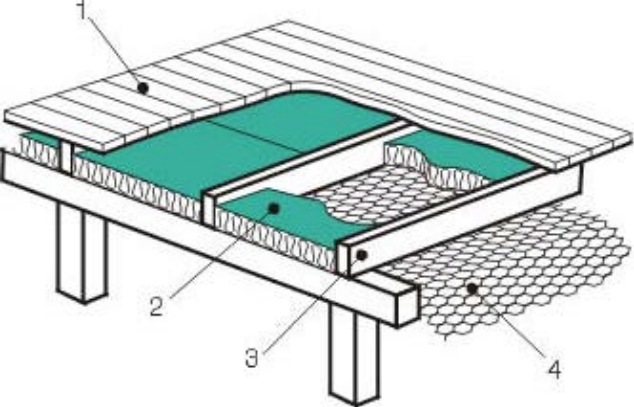
### F11. SUSPENDED FLOOR, CARPETED TIMBER, SUB-FLOOR WALLS, RFL BETWEEN JOISTS

 1. 12mm carpet 2. 10mm underlay 3. 19mm timber floor 4. Air space (reflective) 5. RFL 6. Timber floor joist 7. Sub-floor wall  Joists @ 450 or 600 crs  2. Sub-floor wall may be any suitable material	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	2.3	2.4	2.5	1.9	1.9	2.1
	2.5m height	1.7	1.7	1.7	1.3	1.3	1.3
<b>Sand soil, sheltered setting</b>	0.5m height	2.0	2.1	2.1	1.6	1.6	1.7
	2.5m height	1.6	1.6	1.7	1.2	1.2	1.2
<b>Clay soil, exposed setting</b>	0.5m height	2.0	2.2	2.4	1.6	1.6	2.0
	2.5m height	1.6	1.7	1.7	1.2	1.2	1.3
<b>Sand soil, exposed setting</b>	0.5m height	1.9	2.0	2.1	1.5	1.5	1.7
	2.5m height	1.6	1.6	1.6	1.2	1.2	1.2

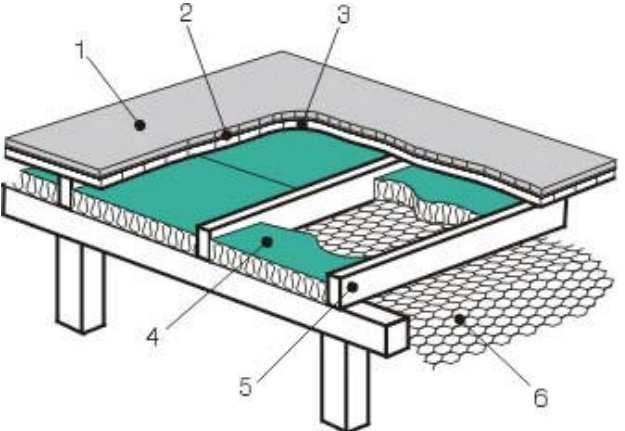
### F12. SUSPENDED FLOOR, TILED TIMBER, SUB-FLOOR WALLS, RFL BETWEEN JOISTS

 1. 6mm tiles 2. 19mm timber floor 3. Air space (reflective) 4. RFL 5. Timber floor joist 6. Sub-floor wall  Joists @ 450 or 600 crs  NOTE: 1. RFL may be corrugated as shown or sheet fixed to underside of joists. 2. Sub-floor wall may be any suitable material	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	2.0	2.1	2.3	1.6	1.6	1.9
	2.5m height	1.4	1.4	1.5	1.0	1.0	1.0
<b>Sand soil, sheltered setting</b>	0.5m height	1.8	1.8	1.9	1.4	1.4	1.5
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0
<b>Clay soil, exposed setting</b>	0.5m height	1.8	1.9	2.1	1.4	1.4	1.7
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0
<b>Sand soil, exposed setting</b>	0.5m height	1.6	1.7	1.8	1.2	1.2	1.4
	2.5m height	1.4	1.4	1.4	1.0	1.0	1.0

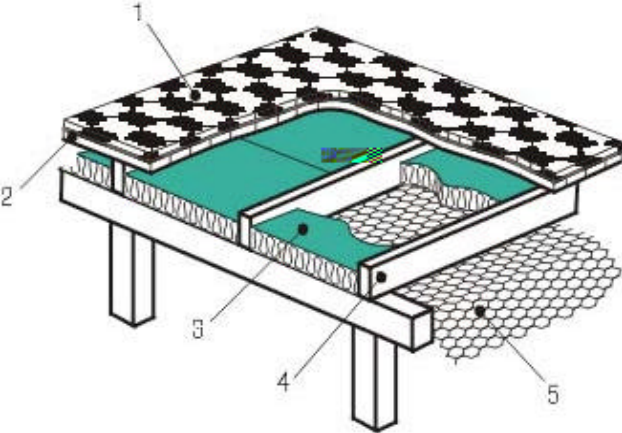
### F13. SUSPENDED FLOOR, BARE TIMBER, NO SUB-FLOOR WALLS, R1.0\* INSULATION BETWEEN JOISTS

 <p>1. 19mm timber floor 2. R1.0* bulk insulation 3. Timber floor joist 4. Mesh</p> <p>Joists @ 450 or 600 crs</p> <p>* For R1.5, R2.0, R2.5 bulk insulation add R0.5, R1.0 &amp; R1.5 respectively to the relevant table R-value.</p>	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	1.9	1.9	2.0	1.6	1.7	1.7
	2.5m height	1.9	1.9	1.9	1.6	1.7	1.7
<b>Sand soil, sheltered setting</b>	0.5m height	1.9	1.9	1.9	1.6	1.7	1.7
	2.5m height	1.9	1.9	1.9	1.6	1.6	1.6
<b>Clay soil, exposed setting</b>	0.5m height	1.9	1.9	1.9	1.6	1.7	1.7
	2.5m height	1.9	1.9	1.9	1.6	1.6	1.6
<b>Sand soil, exposed setting</b>	0.5m height	1.9	1.9	1.9	1.6	1.7	1.7
	2.5m height	1.9	1.9	1.9	1.6	1.6	1.6

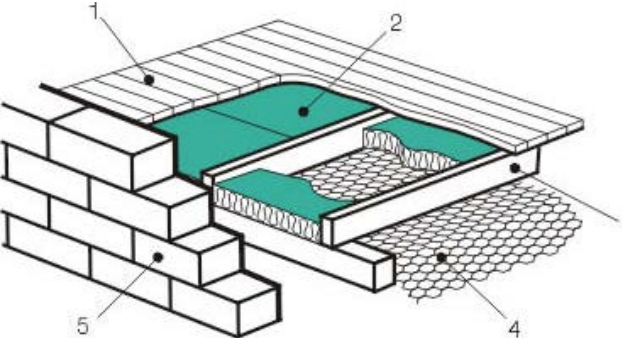
### F14. SUSPENDED FLOOR, CARPETED TIMBER, NO SUB-FLOOR WALLS, R1.0\* INSULATION BETWEEN JOISTS

 <p>1. 12mm carpet 2. 10mm underlay 3. 19mm timber floor 4. R1.0* bulk insulation 5. Timber floor joist 6. Mesh</p> <p>Joists @ 450 or 600 crs</p> <p>* For R1.5, R2.0, R2.5 bulk insulation add R0.5, R1.0 &amp; R1.5 respectively to the relevant table R-value.</p>	Total R-value for floor						
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>			
<b>Clay soil, sheltered setting</b>	0.5m height	2.2	2.2	2.3	1.9	2.0	2.0
	2.5m height	2.2	2.2	2.2	1.9	2.0	2.0
<b>Sand soil, sheltered setting</b>	0.5m height	2.2	2.2	2.2	1.9	2.0	2.0
	2.5m height	2.2	2.2	2.2	1.9	1.9	1.9
<b>Clay soil, exposed setting</b>	0.5m height	2.2	2.2	2.2	1.9	2.0	2.0
	2.5m height	2.2	2.2	2.2	1.9	1.9	1.9
<b>Sand soil, exposed setting</b>	0.5m height	2.2	2.2	2.2	1.9	2.0	2.0
	2.5m height	2.2	2.2	2.2	1.9	1.9	1.9

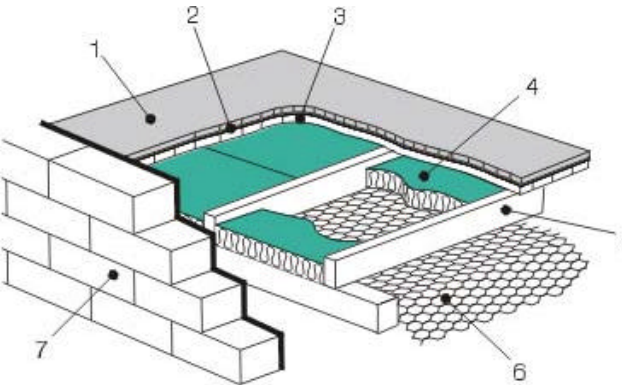
### F15. SUSPENDED FLOOR, TILED TIMBER, NO SUB-FLOOR WALLS, R1.0\* INSULATION BETWEEN JOISTS

 <p>1. 6mm tiles 2. 19mm timber floor 3. R1.0* bulk insulation 4. Timber floor joist 5. Mesh</p> <p>Joists @ 450 or 600 crs</p> <p>* For R1.5, R2.0, R2.5 bulk insulation add R0.5, R1.0 &amp; R1.5 respectively to the relevant table R-value.</p>	Total R-value for floor					
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>						
0.5m height	1.9	2.0	2.1	1.7	1.8	1.8
2.5m height	1.9	2.0	2.0	1.7	1.7	1.7
<b>Sand soil, sheltered setting</b>						
0.5m height	1.9	1.9	2.0	1.7	1.8	1.8
2.5m height	1.9	1.9	1.9	1.7	1.7	1.7
<b>Clay soil, exposed setting</b>						
0.5m height	1.9	1.9	2.0	1.7	1.7	1.7
2.5m height	1.9	1.9	2.0	1.7	1.7	1.7
<b>Sand soil, exposed setting</b>						
0.5m height	1.9	1.9	1.9	1.7	1.7	1.7
2.5m height	1.9	1.9	1.9	1.7	1.7	1.7

### F16. SUSPENDED FLOOR, BARE TIMBER, SUB-FLOOR WALLS, R1.0\* INSULATION BETWEEN JOISTS

 <p>1. 19mm timber floor 2. R1.0* bulk insulation 3. Timber floor joist 4. Mesh 5. Sub-floor wall</p> <p>Joists @450 or 600 crs</p> <p>* For R1.5, R2.0, R2.5 bulk insulation add R0.5, R1.0 &amp; R1.5 respectively to the relevant table R-value.</p> <p>NOTE: Sub-floor wall may be any suitable material</p>	Total R-value for floor					
	Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>						
0.5m height	2.7	2.8	2.9	2.5	2.5	2.7
2.5m height	2.2	2.2	2.2	1.9	1.9	1.9
<b>Sand soil, sheltered setting</b>						
0.5m height	2.4	2.4	2.5	2.2	2.2	2.3
2.5m height	2.1	2.1	2.1	1.8	1.8	1.9
<b>Clay soil, exposed setting</b>						
0.5m height	2.5	2.6	2.8	2.3	2.3	2.6
2.5m height	2.1	2.2	2.2	1.9	1.9	1.9
<b>Sand soil, exposed setting</b>						
0.5m height	2.3	2.3	2.4	2.1	2.1	2.2
2.5m height	2.0	2.1	2.1	1.8	1.8	1.9

### F17. SUSPENDED FLOOR, CARPETED TIMBER, SUB-FLOOR WALLS, R1.0\* INSULATION BETWEEN JOISTS

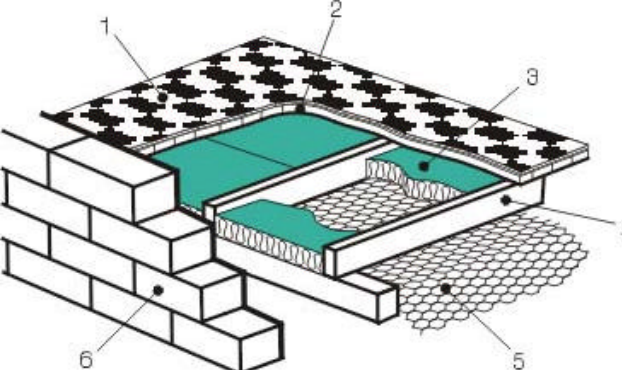
		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>	0.5m height	3.0	3.1	3.2	2.8	2.8	3.0
	2.5m height	2.5	2.5	2.5	2.2	2.2	2.2
<b>Sand soil, sheltered setting</b>	0.5m height	2.7	2.7	2.8	2.5	2.5	2.6
	2.5m height	2.4	2.4	2.4	2.1	2.1	2.2
<b>Clay soil, exposed setting</b>	0.5m height	2.8	2.9	3.1	2.6	2.6	2.9
	2.5m height	2.4	2.5	2.5	2.2	2.2	2.2
<b>Sand soil, exposed setting</b>	0.5m height	2.6	2.6	2.7	2.4	2.4	2.5
	2.5m height	2.3	2.4	2.4	2.1	2.1	2.2

\* For R1.5, R2.0, R2.5 bulk insulation add R0.5, R1.0 & R1.5 respectively to the relevant table R-value.

Joists @ 450 or 600 crs

NOTE: Sub-floor wall may be any suitable material

### F18. SUSPENDED FLOOR, TILED TIMBER, SUB-FLOOR WALLS, R1.0\* INSULATION BETWEEN JOISTS

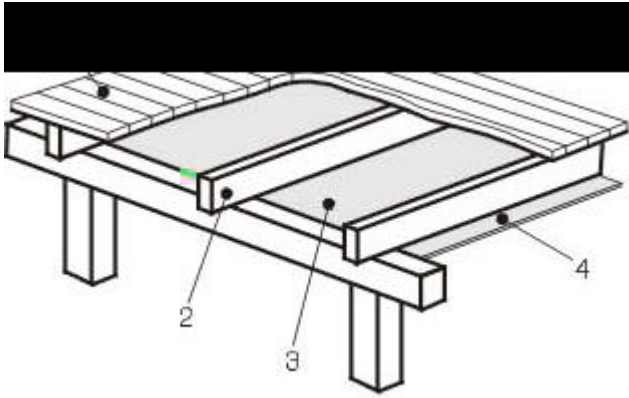
		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
<b>Clay soil, sheltered setting</b>	0.5m height	2.7	2.8	3.0	2.5	2.5	2.8
	2.5m height	2.2	2.2	2.2	1.9	1.9	2.0
<b>Sand soil, sheltered setting</b>	0.5m height	2.4	2.4	2.5	2.2	2.2	2.3
	2.5m height	2.1	2.1	2.1	1.9	1.9	1.9
<b>Clay soil, exposed setting</b>	0.5m height	2.5	2.7	2.8	2.3	2.3	2.6
	2.5m height	2.2	2.2	2.2	1.9	1.9	2.0
<b>Sand soil, exposed setting</b>	0.5m height	2.3	2.4	2.4	2.1	2.1	2.3
	2.5m height	2.1	2.1	2.1	1.9	1.9	1.9

\* For R1.5, R2.0, R2.5 bulk insulation add R0.5, R1.0 & R1.5 respectively to the relevant table R-value.

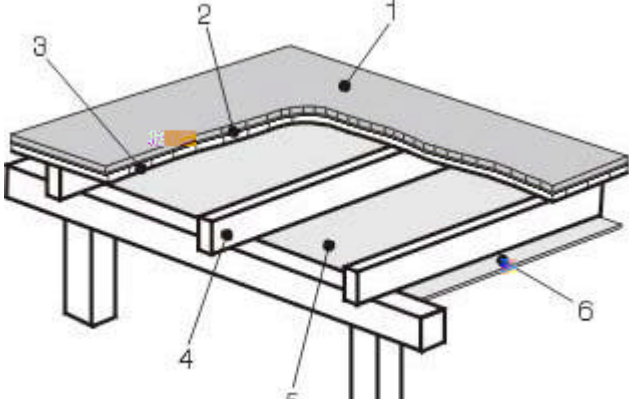
Joists @ 450 or 600 crs

NOTE: Sub-floor wall may be any suitable material

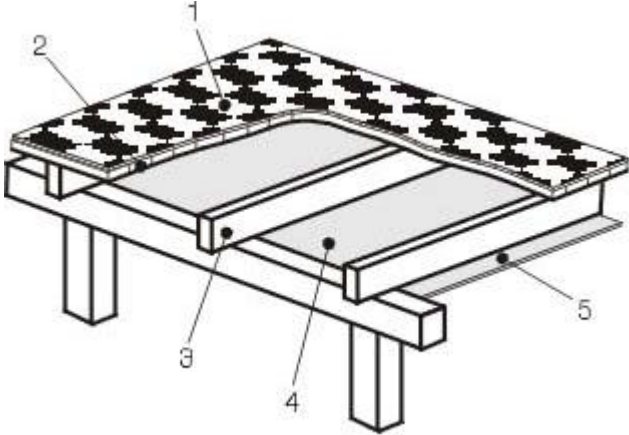
### F19. SUSPENDED FLOOR, BARE TIMBER, NO SUB-FLOOR WALLS, PLYWOOD UNDER JOISTS

		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
 <p>1. 19mm timber floor 2. Timber floor joist 3. Air space (non-reflective) 4. Underlining</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: Underlining – fibre cement sheet, plywood or similar</p>	<b>Clay soil, sheltered setting</b>						
	0.5m height	1.0	1.0	1.1	0.7	0.8	0.8
	2.5m height	1.0	1.0	1.0	0.7	0.7	0.7
	<b>Sand soil, sheltered setting</b>						
	0.5m height	0.9	0.9	1.0	0.7	0.8	0.8
	2.5m height	0.9	0.9	0.9	0.7	0.7	0.7
	<b>Clay soil, exposed setting</b>						
	0.5m height	0.9	1.0	1.0	0.7	0.7	0.7
	2.5m height	0.9	1.0	1.0	0.7	0.7	0.7
	<b>Sand soil, exposed setting</b>						
	0.5m height	0.9	0.9	0.9	0.7	0.7	0.7
	2.5m height	0.9	0.9	0.9	0.7	0.7	0.7

### F20. SUSPENDED FLOOR, CARPETED TIMBER, NO SUB-FLOOR WALLS, PLYWOOD UNDER JOISTS

		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
 <p>1. 12mm carpet 2. 10mm underlay 3. 19mm timber floor 4. Timber floor joist 5. Air space (non-reflective) 6. Underlining</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: Underlining – fibre cement sheet, plywood or similar</p>	<b>Clay soil, sheltered setting</b>						
	0.5m height	1.2	1.3	1.3	1.0	1.1	1.1
	2.5m height	1.2	1.2	1.3	1.0	1.0	1.0
	<b>Sand soil, sheltered setting</b>						
	0.5m height	1.2	1.2	1.3	1.0	1.1	1.1
	2.5m height	1.2	1.2	1.2	0.9	1.0	1.0
	<b>Clay soil, exposed setting</b>						
	0.5m height	1.2	1.2	1.3	1.0	1.0	1.0
	2.5m height	1.2	1.2	1.3	0.9	1.0	1.0
	<b>Sand soil, exposed setting</b>						
	0.5m height	1.2	1.2	1.2	0.9	1.0	1.0
	2.5m height	1.2	1.2	1.2	0.9	1.0	1.0

## F21. SUSPENDED FLOOR, TILED TIMBER, NO SUB-FLOOR WALLS, PLYWOOD UNDER JOISTS

		Total R-value for floor					
		Heat flow <i>DOWN</i>			Heat flow <i>UP</i>		
 <p>1. 6mm tiles 2. 19mm timber floor 3. Timber floor joist 4. Air space (non-reflective) 5. Underlining</p> <p>Joists @ 450 or 600 crs</p> <p>NOTE: Underlining – fibre cement sheet, plywood or similar</p>							
	<b>Clay soil, sheltered setting</b>						
	0.5m height	1.0	1.0	1.1	0.7	0.8	0.8
	2.5m height	1.0	1.0	1.0	0.7	0.7	0.7
	<b>Sand soil, sheltered setting</b>						
	0.5m height	1.0	1.0	1.0	0.7	0.8	0.8
	2.5m height	1.0	1.0	1.0	0.7	0.7	0.7
	<b>Clay soil, exposed setting</b>						
	0.5m height	1.0	1.0	1.0	0.7	0.8	0.8
	2.5m height	1.0	1.0	1.0	0.7	0.7	0.7
	<b>Sand soil, exposed setting</b>						
	0.5m height	1.0	1.0	1.0	0.7	0.8	0.8
2.5m height	1.0	1.0	1.0	0.7	0.7	0.7	

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This publication is a joint venture between the National Timber Development Council and the Forest and Wood Products Research and Development Corporation.

The FWPRDC is jointly funded by the Commonwealth Government and the Australian forest and wood products industry.

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Published April 2002