Building Sheets –'R' average values as in Australia/Europe – US numbers are totally different!

Plaster	10mm - 13mm	0.07 - 0.077	
Drywall/plaster	13mm	0.5	
Chipboard	18mm	0.17	
Plywood	12mm	0.1	
Plywood	25mm	0.22	
Timber	25mm	0.12 - 0.25	
Cement Sheet	8mm	0.005	
Insulation Materials			
Downlight/Loft Mitt		0.62	
Sarking Foil (sisalation/vapor barrier under Gal/ColorBond, only lasts for 3-4 years)		0.2	
Earthwool	200mm	4.0	
Earthwool	100mm	2.0	
Polyurethane foam-a-fill	25mm	1.1	
EPS insulation	25mm	4.0	
Rockwool	100mm	2.7	
Polyester	200mm	3.5	
Polyester	90mm	1.5	
Polystyrene	25mm	0.88	Very poor sound proofing
Common Brick	90mm	0.05 - 0.07	
Mud Brick	300mm	0.27	
Concrete	100mm	0.07	
Granite	25mm	0.009	
Sandstone		0.014	
Glass	6mm	0.006	
Concrete tiles	50mm	0.05	
Terracotta Tiles	6mm	0.004	
Colourbond	1.2mm	0	
Insulated roofing panel	100mm	2.75	
Insulated roofing panel	75mm	2.11	
Insulated roofing panel	50mm	1.48	
Insulated roofing panel	25mm	0.75	
TDC coating	0.3mm	0.75	

rubber	3mm	0.009	
Carpet Polyester	10mm	0.167	
Carpet Wool	10mm	0.38	
Tiles		0.009	
Aerated Concrete	100mm	0.78	
Solid Core Door	44mm	0.38	
Single Pane window	6mm Glass	0.16	
Double Glazed 4mm glass	6mm gap	0.317	Centre of Glass
Double Glazed 6mm glass	6mm gap	0.32	Centre of Glass
Double Glazed 4mm glass	12mm gap	0.37	Centre of Glass
Double Glazed 4mm glass	16mm gap	0.37	Centre of Glass
Triple Glazing 4mm glass	6mm gap	0.46	Centre of Glass
Triple Glazing 4mm glass	12mm gap	0.56	Centre of Glass
Double Glazing low-e 6mm and internal 4mm	12mm gap	0.58	Centre of Glass
Triple Glazing 4mm glass with low-e	12mm gap	0.82	Centre of Glass
Double glazed 4mm - 4mm	10mm gap	0.36	Centre of Glass
Double glazed 6mm - 4mm	10mm gap	0.36	Centre of Glass
Double glazed 4mm - 4mm - low-e	10mm gap	0.55	Centre of Glass
Double glazed 6mm - 4mm - low-e	10mm gap	0.55	Centre of Glass
Hebel Panel	75mm	0.59	
Double glazed Viridian 4mm and 4mm	6mm gap	0.32	Centre of Glass
Double glazing 4mm - 4mm with low-e on inside only	6mm gap	0.42	Centre of Glass
KNAUF ClimaFoam XPS Board	30mm	1.1	
KNAUF ClimaFoam XPS Board	50mm	1.8	
Open Cell Spray Foam icynene	50mm	1.3	
Closed Cell Spray Foam icynene	50mm	2.16	
Double glazed 4mm - 4mm	20mm gap	0.36	Centre of Glass
Double glazed 4mm- 4mm	30mm gap	0.358	Centre of Glass
High Performance Laminate Glass + Low-E	8.37mm	0.29	Centre of Glass Viridian - WOW
Poor Performance Laminate Glass- no Low-E	6mm	0.175	Centre of Glass
Spray Foam Closed Cell (Spray Foam can be variable - depending on contractor)	100mm	4.8~	
Spray Foam Open Cell (Spray Foam can be variable - depending on contractor)	100mm	2.64~	
Suntuf Twin Wall Polycarbonate corflute	10mm	0.34	
Pink Batts HD	195mm	4.1	

Since European R-value uses different units of measure (Celsius, Kelvin, meters, etc.), it may be helpful to know how to convert a European R-value into a U.S. R-value (Australia used the EU system) . This is done by **multiplying the European value by 0.176 and dividing 1 by the result**.

Around most of the world R- values are given in SI Units, typically square metre kelvin per watt. In The US the R- values are given in units of square feet. It is particularly easy to confuse SI and US R -values because R-values in all countries are often cited without their units eg R-3.5. Usually, however, the correct units can be inferred from the context and magnitudes of the values. US R- values are approximately 6 times the SI R- values. For example, an R 4.0 fibreglass Pink Batt (ceiling insulation) in Australia would be labelled R- 23 in the USA. This is very important to keep in mind when reading about insulation

To make it easier to compare products we have provided a conversion table below.

To convert Imperial R- values to Metric EU/AU R-Values multiply by 0.1761

US R- Values	Metric R- Values	Metric R - Values	US R -Values
1	0.18	1	5.70
2	0.35	2	11.0
3	0.53	3	17.0
4	0.70	4	23.0
5	0.88	5	28.0
6	1.10	6	34.0
7	1.20	7	40.0
8	1.40	8	45.0
9	1.60	9	51.0
10	1.80	10	57.0