

## R-VALUES

<b>Material</b>	<b>R-Value per Inch or as Specified</b>
Concrete	.11
Mortar	.20
Brick	.20
Concrete block	1.11 for 8 in.
Soft wood	1.25
Hard wood	.09
Plywood	1.25
Hardboard	.75
Glass (single pane)	.88 to 1.1
Glass (double pane)	1.72
Air space in wall (vertical)	1.35 for .75-in. space
Inside air film (vertical)	.68
Outside air film at 7.5 mph (vertical)	.17
Carpet	2.08
Vinyl flooring	.05
Mineral wool insulation (loose fill)	3.70 per in.
Extruded polystyrene	5.0 per in.
Urethane	7.2 to 8.0 per in.
Urethane with foil .75 in. thick	10.0 per in.
Fiberglass batt	3.17 per in.

## SIZING R-VALUES FOR INSTALLATION

Insulation	R/In.	Approximate Inches Needed					
		R11	R19	R22	R34	R38	R49
<b>Loose Fill Machine-Blown</b>							
Fiberglass	R2.25	5	8.5	10	15.5	17	22
Mineral wool	R3.125	3.5	6	7	11	12.5	16
Cellulose	R3.7	3	5.5	6	9.5	10.5	13.5
<b>Loose Fill Hand-Poured</b>							
Cellulose	R3.7	3	5.5	6	9.5	10.5	13.5
Mineral wool	R3.125	3.5	6	7	11	12.5	16
Fiberglass	R2.25	5	8.5	10	15.5	17	22
Vermiculite	R2.1	5.5	9	10.5	16.5	18	23.5
<b>Batts or Blankets</b>							
Fiberglass	R3.14	3.5	6	7	11	12.5	16
Mineral wool	R3.14	3.5	6	7	11	12.5	16
<b>Rigid Board</b>							
Polystyrene beadboard	R3.6	3	5.5	6.5	9.5	10.5	14
Extruded polystyrene (Styrofoam)	R4-5.41	3-2	5-3.5	5.5-4	8.5-6.5	9.5-7	12.5
Urethane	R6.2	2	3	3.5	5.5	6.5	8
Fiberglass	R4.0	3	5	5.5	8.5	9.5	12.5