

Appendix D: R-value charts

Construction materials	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"
Plywood (Douglas fir)		0.31	0.47	0.62	0.77	0.93
Oriented strand board (OSB)		0.31	0.47	0.62	0.78	0.94
Asbestos-cement board	0.03	0.06	0.09			
Particle board (underlayment)	0.17	0.33	0.49	0.66	0.82	

Sheet goods

Vinyl	0.20					
Linoleum (uninsulated)	0.20					
Linoleum (insulated)		0.40				

Tiles and stone

Ceramic tile		0.23	0.34	0.45	0.57	0.68
Cork tile	0.28	0.56	0.84			
Limestone			0.38	0.50	0.63	0.76
Quarried stone			0.30	0.40	0.50	0.60
Marble		0.20	0.30	0.40	0.50	0.60
Brick			0.38	0.50	0.63	0.76

Carpeting

Commercial glue down		0.60	0.90			
Acrylic level loop		1.04	1.56	2.08	2.60	3.12
Acrylic plush		0.83	1.25	1.66	2.08	2.49
Polyester plush		0.96	1.44	1.92	2.40	2.88
Nylon saxony		0.88	1.32	1.76	2.20	2.64
Nylon shag		0.54	0.81	1.08	1.35	1.62
Wool plush		1.10	1.65	2.20	2.75	3.30

Carpet pads

Rubber (solid)		0.31	0.47	0.62	0.78	0.93
Rubber (waffled)		0.62	0.93	1.24	1.55	1.86
Hair and jute		0.98	1.47	1.96	2.45	2.94
Prime urethane (2-lb. density)		1.08	1.62	2.16	2.70	3.24
Bonded urethane (4-lb. density)		1.04	1.56	2.08	2.60	3.12
Bonded urethane (8-lb. density)		1.10	1.65	2.20	2.75	3.30

Wood flooring

	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"
Ash			0.35	0.47	0.59	0.71
Cherry			0.35	0.46	0.58	0.69
Elm			0.33	0.45	0.56	0.67
Redwood			0.51	0.68	0.84	1.01
Maple			0.35	0.46	0.58	0.69
Oak			0.33	0.45	0.56	0.67
Walnut			0.34	0.45	0.57	0.68
Douglas fir			0.40	0.53	0.66	0.80
Southern pine			0.38	0.50	0.62	0.75
Spruce			0.51	0.68	0.84	1.01
Floating wood floor pad	0.20	0.40				

Windows

Single glass	0.91
Single glass with storm	2.00
Double glazed – 3/16" air space	1.61
Double glazed – 1/4" air space	1.69
Double glazed – 1/2" air space	2.04
Double glazed – 3/4" air space	2.38
Double glazed – with suspended film	2.77
Double glazed – with 2 suspended films	3.85
Low-E	3.13
Low-E – with suspended film	4.05
Low-E – with 2 suspended films	5.05

Note: The R-values depicted in this chart are representative and may vary by manufacturer. For specific R-values, check with the appropriate floor covering manufacturer.

