Conductance and Resistance Values for Exterior Siding Materials

Material	Description	Conductivity k, Btu/(h) (ft²) (°F/in.)	Thickness (in.)	Conductance C, Btu/(h) (ft²) (°F)	Resistance R, 1/[Btu/(h) (ft²) (°F)]
Brick	Common	5.0	4	1.25	0.80
Brick	Face	9.0	4	2.27	0.44
Stucco		5.0	1	5.0	0.20
Asbestos cement shingles				4.76	0.21
Wood shingles	16–7$\frac{1}{2}$-in. exposure			1.15	0.87
Wood shingles	Double 16–12 in. exposure			0.84	1.19
Wood shingles	Plus $\frac{5}{16}$ in. insulated backerboard			0.71	1.40
Asbestos cement siding	$\frac{1}{4}$ in. lapped			4.76	0.21
Asphalt roll siding				6.50	0.15
Asphalt insulating siding			$\frac{1}{2}$	0.69	1.46
Wood	Drop siding, 1 × 8 in.			1.27	0.79
Wood	Bevel, $\frac{1}{2}$ × 8 in. lapped			1.23	0.81
Wood	Bevel, $\frac{3}{4}$ × 10 in. lapped			0.95	1.05
Wood	Plywood, $\frac{3}{8}$ in. lapped			1.59	0.59
Hardboard	Medium density	0.73	$\frac{1}{4}$	2.94	0.34
	Tempered	1.00	$\frac{1}{4}$	4.00	0.25
Plywood lap siding			$\frac{3}{8}$	1.79	0.56
Plywood flat siding			$\frac{3}{8}$	2.33	0.43

Source: Courtesy of Johns-Mansville, Denver, CO.