

Conductance and Resistance Values for Interior Finishes

Material	Description	Conductivity <i>k</i> , Btu/(h) (ft ²) (°F/in.)	Thickness (in.)	Conductance <i>C</i> , Btu/(h) (ft ²) (°F)	Resistance <i>R</i> , 1/[Btu/(h) (ft ²) (°F)]
Gypsum board		1.11	$\frac{3}{8}$	3.10	0.32
			$\frac{1}{2}$	2.25	0.45
Cement plaster	Sand aggregate	5.0	$\frac{1}{2}$	10.00	0.10
			$\frac{3}{4}$	6.66	0.15
Gypsum plaster	Sand aggregate	5.6	$\frac{1}{2}$	11.10	0.09
			$\frac{5}{8}$	9.10	0.11
Gypsum plaster	Lightweight aggregate	1.6	$\frac{1}{2}$	3.12	0.32
			$\frac{5}{8}$	2.67	0.39
Gypsum plaster on					
Metal lath	Sand aggregate		$\frac{3}{4}$	7.70	0.13
Metal lath	Lightweight aggregate		$\frac{3}{4}$	2.13	0.47
Gypsum board, $\frac{3}{8}$ in.	Sand aggregate		$\frac{7}{8}$	2.44	0.41
Insulating board		0.38	$\frac{1}{2}$	0.74	1.35
Plywood		0.80	$\frac{3}{8}$	2.13	0.47

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