



Emissivity Values for Common Materials & Non-Metals

These emissivities values are approximate and may vary depending on the actual material surface and conditions.

Material	Emissivity			
	1.0 μm	5.0 μm	7.9 μm	8-14 μm
Asbestos	0.9	0.9	0.95	0.95
Assphalt	n.r.	0.9	0.95	0.95
Basalt	n.r.	0.7	0.7	0.7
Carbon				
Unoxidized	0.8-0.95	0.8-0.9	0.8-0.9	0.8-0.9
Graphite	0.8-0.9	0.7-0.9	0.7-0.8	0.7-0.8
Carborundum	n.r.	0.9	0.9	0.9
Ceramic	0.4	0.85-0.95	0.95	0.95
Clay	n.r.	0.85-0.95	0.95	0.95
Concrete	0.65	0.9	0.95	0.95
Cloth	n.r.	0.95	0.95	0.95
Glass				
Plate	n.r.	0.98	0.85	0.85
Gob	n.r.	0.9	n.r.	n.r.
Gravel	n.r.	0.95	0.95	0.95
Gypsum	n.r.	0.4-0.97	0.8-0.95	0.8-0.95
Ice	n.r.		0.98	0.98
Limestone	n.r.	0.4-0.98	0.98	0.98
Paint (non-Al.)		0.9-0.95	0.9-0.95	
Paper (any color)	n.r.	0.95	0.95	0.95
Plastic				
Qpaque	n.r.	0.95	0.95	0.95
Over 20 mils	n.r.			
Rubber	n.r.	0.9	0.95	0.95
Sand	n.r.	0.9	0.9	0.9
Snow	n.r.		0.9	0.9
Soil	n.r.	< td>	0.9-0.98	0.9-0.98
Water	n.r.		0.93	0.93
Wood, (natural)	n.r.	0.9-0.95	0.9-0.95	0.9-0.95

n.r. = not recommended