

RADIATION TABLE

Emissivity, Absorptivity and Reflectivity of Surfaces

SURFACES at 70° - 100° F	Emissivity and Absorptivity	Reflectivity	Authority
K SHIELD™	.02 to .05	.95 to .98	Critical Table
ALUMINUM	Polished Al. Paint .02 to .045 .40 to .65	.955 to .98 .35 to .60	Natl. Bureau of Standards E. Schmidt
ASBESTOS	Board Paper .96 .93	.04 .07	E. Schmidt E. Schmidt
ASPHALT	.90 to .98	.02 to .10	ASHRAE Guide
BRASS	Natural Surface Polished .06 to .07 .05	.93 to .94 .05	E. Schmidt E. Schmidt
BRICK	.93	.07 ASHRAE Guide	E. Schmidt
CERAMA-TECH 100	(TE) .90	(SR) .83	Florida Solar Energy Center Surface Optics Corp
CHROMIUM Polished	.08	.92	Natl. Bureau of Standards
CONCRETE	.85 to .95	.05 to .15	ASHRAE Guide
COPPER	Polished Oxidized black .04 .78	.96 .22	Natl. Bureau of Standards E. Schmidt
ENAMEL, WHITE	.92	.08	E. Schmidt
GLASS, polished	.95	.05	E. Schmidt
GOLD	.02	.98	Natl. Bureau of Standards
ICE	.96	.04	E. Schmidt
IRON	.242	.758	E. Schmidt
	Polished Rusty .06 .85	.94 .15	Natl. Bureau of Standards Natl. Bureau of Standards
MARBLE, polished	.931	.069	E. Schmidt
MONEL mental, polished	.02 to .05	.95 to .98	ASHRAE Guide
NICKEL	.11	.89	E. Schmidt
	Polished .06	.94	E. Schmidt
OIL, on polished metal			
Very thin	.06	.94	E. Schmidt
.001" thick	.27	.73	E. Schmidt
.002" thick	.46	.54	E. Schmidt
.005" thick	.72	.28	E. Schmidt
PAINT	Ordinary, including White Aluminum, Gilt or Bronze Whitewash Varnish .85 to .95 .40 to .60 .85 to .95 .89	.05 to .15 .40 to .60 .05 to .15 .11	ASHRAE Guide ASHRAE Guide ASHRAE Guide E. Schmidt
PAPER	White Roofing Paper .94 .91	.06 .09	E. Schmidt E. Schmidt
PLASTER	.93	.07	E. Schmidt
PORCELAIN	.94	.06	E. Schmidt
SILVER, polished	.01	.99	Natl. Bureau of Standards
SLATE	.90 to .98	.02 to .10	ASHRAE Guide
STEEL	Polished Rusty Sheet, polished .07 .80 .20	.93 .20 .80	Natl. Bureau of Standards E. Schmidt Am. Soc. Refrig Engineers
TILE, white	.85 to .95	.05 to .15	ASHRAE Guide
WATER	.96	.04	E. Schmidt
WOOD	.90 to .92	.08 to .10	E. Schmidt