

TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C_a) OF BUILDING MATERIALS AND INSULATORS—Continued

The coefficients are expressed in Btu per hour per square foot per degree Fahrenheit per 1 in. thickness, unless otherwise indicated.

Material	Description	DENSITY (Lb per Cu Ft)	MEAN TEMP. (DEG FAHR)	CONDUCTIVITY (k) OR CONDUCTANCE (C_a)	RESISTIVITY OR RESISTANCE (R) $\left(\frac{1}{k}\right)$	AUTHORITY
INSULATION—BLANKET OR FLEXIBLE TYPES FIBER	Typical	—	—	0.27*	3.70	(1)
	Chemically treated wood fibers held between layers of strong paper/	3.62	70	0.25	4.00	(3)
	Eel grass between strong paper/	4.60	90	0.26	3.85	(3)
	" " " "	3.40	90	0.25	4.00	(3)
	Flax fibers between strong paper/	4.90	90	0.28	3.57	(3)
	Hair felt between layers of paper/	11.00	75	0.25	4.00	(3)
	Kapok between burlap or paper/	1.00	90	0.24	4.17	(3)
INSULATION—SEMI- RIGID TYPE FIBER	Felted cattle hair/	13.00	90	0.26	3.84	(3)
	" " " "	11.00	90	0.26	3.84	(3)
	Flax/	12.10	70	0.30	3.33	(3)
	Flax and rye/	13.60	90	0.32	3.12	(3)
	Felted hair and asbestos/	7.80	90	0.28	3.57	(3)
	75% hair and 25% jute/	6.30	90	0.27	3.70	(3)
	50% hair and 50% jute/	6.10	90	0.26	3.85	(3)
	Jute/	6.70	75	0.25	4.00	(3)
	Felted jute and asbestos/	10.00	90	0.37	2.70	(3)
	Compressed peat moss	11.00	70	0.26	3.84	(3)
INSULATION—LOOSE FILL OR BAT TYPE FIBER	Made from ceiba fibers/	1.90	75	0.23	4.35	(3)
	" " " "	1.60	75	0.24	4.17	(3)
GLASS WOOL	Fibrous material made from dolomite and silica	1.50	75	0.27	3.70	(3)
	Fibrous material made from slag	9.40	103	0.27	3.70	(3)
GRANULAR	Fibrous material 25 to 30 microns in diameter, made from virgin bottle glass	1.50	75	0.27	3.70	(3)
	Made from combined silicate of lime and alumina	4.20	72	0.24	4.17	(3)
GYPSUM	Cellular, dry	30.00	90	1.00	1.00	(3)
	" " " "	24.00	90	0.77	1.30	(3)
	" " " "	18.00	90	0.59	1.69	(3)
	" " " "	12.00	90	0.44	2.27	(3)
	Flaked, dry and fluffy/	34.00	90	0.60	1.67	(3)
	" " " "	26.00	90	0.52	1.92	(3)
	" " " "	24.00	75	0.48*	2.08	(3)
	" " " "	19.80	90	0.35	2.86	(3)
	" " " "	18.00	75	0.34	2.94	(3)
	" " " "	—	—	0.27*	3.70	(3)
MINERAL WOOL	All forms, typical	8.10	90	0.31	3.22	(3)
	About $\frac{1}{8}$ -in. particles	21.00	90	0.30	3.33	(3)
REGRANULATED CORK	Fibrous material made from rock	18.00	90	0.29	3.45	(3)
	" " " "	14.00	90	0.28	3.57	(3)
ROCK WOOL	" " " "	10.00	90	0.27*	3.70	(3)
	" " " "	14.50	77	0.33	3.03	(3)
SAWDUST	Rock wool with a binding agent	14.50	75	0.38	2.63	(3)
	Rock wool with flax, straw pulp, and binder	11.50	72	0.31	3.22	(3)
SHAVINGS	Rock wool with vegetable fibers	—	86	1.04	0.96	(3)
	Ordinary	—	86	0.71	1.41	(3)
INSULATION—RIGID CORKBOARD	Typical	—	—	0.30*	3.33	(3)
	No added binder	14.00	90	0.34	2.94	(3)
	" " " "	10.60	90	0.30	3.33	(3)
	" " " "	7.00	90	0.27	3.70	(3)
	" " " "	5.40	90	0.25	4.00	(3)
	Asphaltic binder	14.50	90	0.32	3.12	(3)
	Typical	—	—	0.33*	3.03	(3)
FIBER	Made from chemically treated wood fiber	20.00	70	0.36	2.78	(3)
	Made from chemically treated wood and vegetable fibers	25.00	75	0.38	2.63	(3)

For notes see Page 95.

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Material	Description	DENSITY (Lb per Cu Ft)	MEAN TEMP. (DEG FAHR)	CONDUCTIVITY (k) OR CONDUCTANCE (C_a)	RESISTIVITY OR RESISTANCE (R) $\left(\frac{1}{k}\right)$	AUTHORITY
INSULATION—RIGID —Continued FIBER	Made from corn stalks	15.00	71	0.33	3.03	(3)
	" " exploded wood fiber	17.90	78	0.32	3.12	(4)
	" " hard wood fibers	15.20	70	0.32	3.12	(3)
	Insulating plaster 9/10-in. thick applied to $\frac{3}{4}$ -in. plaster board base	54.00	75	1.07†	0.93	(3)
	Made from licorice roots	16.10	81	0.34	2.94	(3)
	Made from 85% magnesia and 15% asbestos	19.30	86	0.51	1.96	(1)
	Made from shredded wood and cement	24.20	72	0.46	2.17	(3)
	" " sugar cane fiber	13.50	70	0.33	3.03	(3)
	Sugar cane fiber insulation blocks encased in asphalt membrane	13.80	70	0.30	3.33	(3)
	Made from wheat straw	17.00	68	0.33	3.03	(3)
	" " wood fiber	15.90	72	0.33	3.03	(3)
	" " " "	15.00	70	0.33	3.03	(3)
	" " " "	—	52	0.33	3.03	(6)
	" " " "	8.50	72	0.29	3.45	(3)
	" " " "	15.20	—	0.33	3.03	(3)
	" " " "	16.90	90	0.34	2.94	(1)
BUILDING BOARDS ASBESTOS	Compressed cement and asbestos sheets	123.00	86	2.70	0.37	(1)
	Corrugated asbestos board	20.40	110	0.48	2.08	(2)
	Pressed asbestos mill board	60.50	86	0.84	1.19	(1)
	Sheet asbestos	48.30	110	0.29	3.45	(2)
	Gypsum between layers of heavy paper	62.80	70	1.41	0.71	(3)
GYPSUM	Rigid, gypsum between layers of heavy paper ($\frac{1}{2}$ -in. thick)	53.50	90	2.60†	0.38	(1)
	Gypsum mixed with sawdust between layers of heavy paper (0.39-in. thick)	60.70	90	3.60†	0.28	(1)
PLASTER BOARD	($\frac{1}{2}$ in.)	—	—	3.73†	0.27	—
	($\frac{3}{4}$ in.)	—	—	2.82†	0.35	—
ROOFING CONSTRUCTION ROOFING	Asphalt, composition or prepared	70.00	75	6.50†	0.15	(3)
	Built up— $\frac{1}{4}$ -in. thick	—	—	3.53†	0.28	—
	Built up, bitumen and felt, gravel or slag surfaced	—	—	1.33†	0.75	(2)
	Plaster board, gypsum fiber concrete and 3-ply roof covering	52.40	76	0.58†	1.72	(4)
SHINGLES	Asbestos	65.00	75	6.00†	0.17	(3)
	Asphalt	70.00	75	6.50†	0.15	(3)
	Slate	201.00	—	10.37*	0.10	(7)
	Wood	—	—	1.28†	0.78	—
PLASTERING MATERIALS PLASTER	Cement	—	—	8.00	0.13	(2)
	Gypsum, typical	—	—	3.30*	0.30	(4)
	Thickness $\frac{1}{2}$ in.	—	73	8.80†	0.11	(4)
METAL LATH AND PLASTER WOOD LATH AND PLASTER	Total thickness $\frac{1}{2}$ in.	—	—	4.40†	0.23	(4)
	$\frac{3}{4}$ -in. plaster, total thickness $\frac{1}{2}$ in.	—	70	2.50†	0.40	(4)
BUILDING CONSTRUCTIONS FRAME	1-in. fir sheathing and building paper	—	30	0.711*	1.41	(4)
	1-in. fir sheathing, building paper, and yellow pine lap siding	—	20	0.50†	2.00	(4)
	1-in. fir sheathing, building paper and stucco	—	20	0.82†	1.22	(4)
	Pine lap siding and building paper—siding 4 in. wide	—	16	0.85†	1.18	(4)
	Yellow pine lap siding	—	—	1.28†	0.78	(3)
FLOORING	Maple—across grain	40.00	75	1.20	0.83	(3)
	Battleship linoleum ($\frac{1}{4}$ -in.)	—	—	1.36†	0.74	—

For notes see Page 95.