TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C) OF BUILDING MATERIALS AND INSULATORS[a]—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)	Resistivity $\left(\frac{1}{k}\right)$ or Resistance $\left(\frac{1}{C}\right)$	Authority
INSULATION—BLANKET OR FLEXIBLE TYPES						
Fiber	Typical	—	—	0.27*	3.70	—
	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	(1)
	" " " " " "	3.40	90	0.25	4.00	(1)
	Flax fibers between strong paper/	4.90	90	0.28	3.57	(1)
	Chemically treated hog hair between kraft paper/	5.76	71	0.26	3.85	(3)
	Chemically treated hog hair between kraft paper and asbestos paper/	7.70	71	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	(1)
	Jute fiber/	6.70	75	0.25	4.00	(3)
	Ground paper between two layers, each ⅜-in. thick made up of two layers of kraft paper (sample ¾-in. thick)	12.1	75	0.40†	2.50	(4)
	Stitched and creped expanding fibrous blanket	1.50	70	0.27	3.70	(3)
	Paper and asbestos fiber with emulsified asphalt binder	4.2	94	0.28	3.57	(1)
INSULATION—SEMI-RIGID TYPE						
Fiber	Felted cattle hair/	13.00	90	0.26	3.84	(1)
	" " "	11.00	90	0.26	3.84	(1)
	Flax/	12.10	70	0.30	3.33	(3)
	Flax and rye/	13.60	90	0.32	3.12	(1)
	Felted hair and asbestos/	7.80	90	0.28	3.57	(1)
	75% hair and 25% jute/	6.30	90	0.27	3.70	(1)
	50% hair and 50% jute/	6.10	90	0.26	3.85	(1)
	Jute/	6.70	75	0.25	4.00	(3)
	Felted jute and asbestos/	10.00	90	0.37	2.70	(1)
	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)
Fiber	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	(1)
	Redwood bark	3.00	90	0.31	3.22	(1)
	Redwood bark	5.00	75	0.26	3.84	(3)
Glass Wool	Fibrous material 25 to 30 microns in diameter, made from virgin bottle glass	1.50	75	0.27	3.70	(3)
Granular	Made from combined silicate of lime and alumina	4.20	72	0.24	4.17	(3)
	Made from expanded aluminum-magnesium silicate	6.32	86	0.29	3.45	(3)
Gypsum	Cellular, dry	30.00	90	1.00	1.00	(1)
	" "	24.00	90	0.77	1.30	(1)
	" "	18.00	90	0.59	1.69	(1)
	" "	12.00	90	0.44	2.27	(1)
	Flaked, dry and fluffy/	34.00	90	0.60	1.67	(1)
	" " " "	26.00	90	0.52	1.92	(1)
	" " " "	24.00	75	0.48*	2.08	(3)
	" " " "	19.80	90	0.35	2.86	(1)
	" " " "	18.00	75	0.34	2.94	(3)
Mineral Wool	All forms, typical	—	—	0.27*	3.70	—
Regranulated Cork	About ⅜-in. particles	8.10	90	0.31	3.22	(1)
Rock Wool	Fibrous material made from rock	21.00	90	0.30	3.33	(1)
	" " " " "	18.00	90	0.29	3.45	(1)
	" " " " "	14.00	90	0.28	3.57	(1)
	" " " " "	10.00	90	0.27*	3.70	(1)
	Rock wool with a binding agent	14.50	77	0.33	3.03	(1)
	Rock wool with flax, straw pulp, and binder	14.50	75	0.38	2.63	(3)
	Rock wool with vegetable fibers	11.50	72	0.31	3.22	(3)

For notes see Page 94.

TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C) OF BUILDING MATERIALS AND INSULATORS[a]—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)	Resistivity $\left(\frac{1}{k}\right)$ or Resistance $\left(\frac{1}{C}\right)$	Authority
INSULATION—LOOSE FILL OR BAT TYPE —Continued						
Various	Various	12.00	90	0.41	2.44	(1)
Sawdust	Various from planer	8.80	90	0.41	2.44	(1)
Shavings	From maple, beech and birch (coarse)	13.20	90	0.36	2.78	(1)
INSULATION—RIGID						
Corkboard	Typical	—	—	0.30*	3.33	—
	No added binder	14.00	90	0.34	2.94	(1)
	" " "	10.60	90	0.30	3.33	(1)
	" " "	7.00	90	0.27	3.70	(1)
	" " "	5.40	90	0.25	4.00	(1)
	Asphaltic binder	14.50	90	0.32	3.12	(1)
Fiber	Typical	—	—	0.33*	3.03	—
	Chemically treated hog hair covered with film of asphalt	10.00	75	0.28	3.57	(3)
	Made from corn stalks	15.00	71	0.33	3.03	(3)
	" " exploded wood fibers	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 ¾ in. plaster board base	54.00	75	1.07†	0.93	(3)
	Made from licorice roots	16.10	81	0.34	2.94	(3)
	" " 85% magnesia and 15% asbestos	19.30	86	0.51	1.96	(1)
	" " 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)
Gypsum	Gypsum between layers of heavy paper	62.80	70	1.41	0.71	(3)
	Rigid, gypsum between layers of heavy paper (½ 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)
Plasterboard	(⅜ in.)	—	—	3.73†*	0.27	—
	(½ in.)	—	—	2.82†*	0.35	—
ROOFING CONSTRUCTION						
Roofing	Asphalt, composition or prepared	70.00	75	6.50†*	0.15	(3)
	Built up—⅜ in. thick	—	—	3.53†*	0.28	—
	Built up, bitumen and felt, gravel or slag surfaced[e]	—	—	1.33	0.75	(2)
	Plasterboard, gypsum fiber concrete and 3-ply roof covering 2½ in. thick	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	—
	Gypsum and expanded aluminum-magnesium silicate, mix 4 to 1	39.9	75	0.85	1.18	(3)
	Thickness ⅜ in.	—	73	8.80†	0.11	(4)
Metal Lath and Plaster	Total thickness ¾ in.	—	—	4.40†*	0.23	—
Wood Lath and Plaster	½ in. plaster, total thickness ¾ in.	—	70	2.50†*	0.40	(4)

For notes see Page 94.