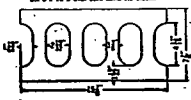
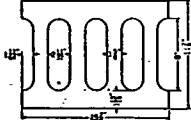


TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C) OF BUILDING AND INSULATING MATERIALS—Continued

These constants are expressed in Btu per (hour) (square foot) (Fahrenheit degree temperature difference). Conductivities (k) are per inch thickness and conductances (C) are for thickness or construction stated, not per inch thickness.

MATERIAL	DESCRIPTION	DENSITY (Lb per Cu Ft)	MEAN TEMP (FAHR DEG)	CONDUCTIVITY OR CONDUCTANCE		RESISTANCE		AUTHORITY
				(k)	(C)	Per Inch Thickness ($\frac{1}{k}$)	For Thickness Listed ($\frac{1}{C}$)	
MASONRY MATERIALS								
—(Continued)								
CONCRETE								
	Sand and gravel aggregate, various ages and mixes	—	—	11.85 to 16.36	—	0.09 to 0.06	—	(5)
	Sand and gravel aggregate	142	75	12.6	—	0.08	—	(4)
	Limestone aggregate	132	75	10.8	—	0.09	—	(4)
	Cinder aggregate	97	75	4.9	—	0.22	—	(4)
	Steam treated limestone slag aggregate	74.6	75	2.27	—	0.44	—	(4)
	Pumice (Mined in California) aggregate	65.0	75	2.42	—	0.41	—	(4)
	Expanded burned clay aggregate	59.9	75	2.28	—	0.44	—	(4)
	Burned clay aggregate	67.1	75	2.88	—	0.35	—	(4)
	Blast furnace slag aggregate	76.0	70	1.6	—	0.63	—	(3)
	Expanded vermiculite aggregate	20	90	0.68	—	1.47	—	(3)
	Expanded vermiculite aggregate	26.7	90	0.76	—	1.32	—	(3)
	Expanded vermiculite aggregate	35	90	0.88	—	1.16	—	(3)
	Expanded vermiculite aggregate	50	90	1.10	—	0.91	—	(3)
	Concrete plank	76	75	2.5	—	0.40	—	(3)
	Cellular concrete	49.0	75	1.06	—	0.94	—	(3)
	Cellular concrete	50.0	75	1.44	—	0.69	—	(3)
	Cellular concrete	60.0	75	1.80	—	0.56	—	(3)
	Cellular concrete	70.0	75	2.18	—	0.46	—	(3)
	Air-cooled slag aggregate	124.2	119	5.3	—	0.19	—	(1)
	Air-cooled slag aggregate	124.9	119	5.9	—	0.17	—	(1)
8 In. Concrete Blocks								
								
	8 in. three oval core, sand and gravel aggregate	126.4	40	—	0.90	—	1.11	(4)
	8 in. three oval core, crushed limestone aggregate	134.3	40	—	0.86	—	1.16	(4)
	8 in. three oval core, cinder aggregate	86.2	40	—	0.58	—	1.73	(4)
	8 in. three oval core, burned clay aggregate	67.7	40	—	0.50	—	2.00	(4)
	8 in. three oval core, expanded blast furnace slag aggregate	—	40	—	0.49	—	2.04	(4)
	8 in. three oval core, air-cooled slag aggregate	—	40	—	0.68	—	1.47	(4)
12 In. Concrete Blocks								
								
	12 in. three oval core, sand and gravel aggregate	124.9	40	—	0.78	—	1.28	(4)
	12 in. three oval core, cinder aggregate	86.2	40	—	0.53	—	1.88	(4)
	12 in. three oval core, burned clay aggregate	76.7	40	—	0.47	—	2.13	(4)
GYP SUM								
	3 in. solid gypsum partition tile	—	—	2.41	—	0.42	—	(4)
	3 in. three cell gypsum partition tile	—	—	—	0.74	—	1.35	(4)
	4 in. three cell gypsum partition tile	—	—	—	0.60	—	1.67	(4)
	57 1/2 percent gypsum, 12 1/2 percent wood chips	51.2	74	1.68	—	0.60	—	(4)
	Gypsum plaster	—	—	3.30	—	0.30	—	(4)

See footnotes on first page of Table 2.

TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C) OF BUILDING AND INSULATING MATERIALS—Continued

These constants are expressed in Btu per (hour) (square foot) (Fahrenheit degree temperature difference). Conductivities (k) are per inch thickness and conductances (C) are for thickness or construction stated, not per inch thickness.

MATERIAL	DESCRIPTION	DENSITY (LB PER CU FT)	MEAN TEMP (FAHR DEG)	CONDUCTIVITY OR CONDUCTANCE		RESISTANCE		AUTHORITY	
				(k)	(C)	Per Inch Thickness (1/E)	For Thickness Listed (1/C)		
PLASTERING MATERIALS	Gypsum plaster, 1/2 in. thick	—	73	—	8.80	—	0.11	(4)	
	Cement plaster	—	—	8.00	—	0.13	—	(2)	
	Wood, lath and plaster, total thickness 1/2 in.	—	70	—	2.50	—	0.40	(4)	
	Gypsum plaster and expanded vermiculite, 4 to 5 in.	39.9	75	0.85	—	1.18	—	(3)	
	Insulating plaster 0.9 in. thick applied to 1/2 in. gypsum board	54.0	75	—	1.07	—	0.93	(3)	
ROOFING	Asbestos shingles	65.0	75	—	6.0	—	0.17	(3)	
	Asphalt, composition or prepared	70.0	75	—	6.5	—	0.15	(3)	
	Asphalt shingles	70.0	75	—	6.5	—	0.15	(3)	
	Built-up roofing, bitumen or felt, gravel or slag surfaced	—	—	1.33	—	0.75	—	(2)	
	Slate	—	—	10.00	—	0.10	—	(3)	
Wood shingles	—	—	—	1.23	—	0.78	(3)		
WOODS	Balsa	20.0	90	0.58	—	1.72	—	(1)	
	Balsa	8.8	90	0.38	—	2.63	—	(1)	
	Balsa	7.3	90	0.33	—	2.63	—	(1)	
	California redwood, 0 % moisture	28.0	75	0.70	—	1.43	—	(4)	
	Cypress	28.7	88	0.67	—	1.49	—	(1)	
	Douglas fir, 0 % moisture	34.0	75	0.67	—	1.49	—	(4)	
	Eastern hemlock, 0 % moisture	30.0	75	0.76	—	1.32	—	(4)	
	Long leaf yellow pine, 0 % moisture	40.0	75	0.86	—	1.16	—	(4)	
	Mahogany	34.3	88	0.90	—	1.11	—	(1)	
	Hard maple, 0 % moisture	46.0	75	1.05	—	0.95	—	(4)	
	Maple	44.3	88	1.10	—	0.91	—	(1)	
	Maple, across grain	40.0	75	1.20	—	0.83	—	(3)	
	Norway pine, 0 % moisture	32.0	75	0.74	—	1.35	—	(4)	
	Red cypress, 0 % moisture	32.0	75	0.79	—	1.27	—	(4)	
	Red oak, 0 % moisture	48.0	75	1.18	—	0.85	—	(4)	
	Short leaf yellow pine, 0 % moisture	36.0	75	0.91	—	1.10	—	(4)	
	Soft elm, 0 % moisture	34.0	75	0.88	—	1.14	—	(4)	
	Soft maple, 0 % moisture	42.0	75	0.95	—	1.05	—	(4)	
	Sugar pine, 0 % moisture	28.0	75	0.64	—	1.56	—	(4)	
	Virginia pine	34.3	88	0.96	—	1.04	—	(1)	
	West coast hemlock, 0 % moisture	30.0	75	0.79	—	1.27	—	(4)	
	White pine	31.2	88	0.78	—	1.28	—	(1)	
	Yellow pine	—	—	—	1.00	—	1.00	—	(2)
	Sawdust, various	12.0	90	0.41	—	2.44	—	(1)	
	Shavings, various from planer	8.8	90	0.41	—	2.44	—	(1)	
	Shavings, from maple beech and birch (coarse)	13.2	90	0.36	—	2.78	—	(1)	
	INSULATING MATERIALS BLANKET AND BAT INSULATIONS	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)
		Eel grass between strong paper	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)

See footnotes on first page of Table 2.