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TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C) 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)	RESISTIVITY ($\frac{1}{k}$) OR RESISTANCE (R)	AUTHORITY
BUILDING CONSTRUCTIONS						
FRAME	1-in. fir sheathing and building paper	---	30	0.71†*	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)
FLOORING	Yellow pine lap siding	---	---	1.28†*	0.78	(4)
	Maple—across grain	40.00	75	1.20	0.83	(3)
	Battleship linoleum (¼-in.)	---	---	1.36†*	0.74	(—)
AIR SPACE AND SURFACE COEFFICIENTS						
AIR SPACES						
SURFACES, ORDINARY	Over ¾-in. faced with ordinary building materials	---	40	1.10†*	0.91	(4)
	Still air (f_i)	---	---	1.65†*	0.61	(4)
SURFACE, BRIGHT ALUMINUM	15 mph—(f_o)	---	---	6.00†*	0.17	(4)
	Still air (f_i)	---	60	1.18†	0.85	(—)
AIR SPACES FACED WITH BRIGHT ALUMINUM FOIL						
	Air space, faced one side with bright aluminum foil, over ¾-in. wide	---	50	0.46†*	2.17	(4)
	Air space, faced one side with bright aluminum foil, ½-in. wide	---	50	0.62†	1.61	(4)
	Air space, faced both sides with bright aluminum foil, over ¾-in. wide	---	50	0.41†*	2.44	(4)
	Air space, faced both sides with bright aluminum foil, ½-in. wide	---	50	0.57†	1.75	(4)
	Air space divided in two with single curtain of bright aluminum foil (both sides bright)	---	50	0.23†*	4.35	(4)
	Each space over ¾-in. wide	---	50	0.31†	3.23	(4)
	Air space with multiple curtains of bright aluminum foil, bright on both sides, curtains more than ¾-in. apart, in standard construction:	---	---	---	---	---
	2 curtains, forming 3 spaces	---	50	0.15†*	6.78	(4)
	3 curtains, forming 4 spaces	---	50	0.11†*	9.22	(4)
	4 curtains, forming 5 spaces	---	50	0.09†*	11.66	(4)
WOODS (Across Grain)						
BALSA	---	20.0	90	0.58	1.72	(1)
	---	8.8	90	0.38	2.63	(1)
	---	7.3	90	0.33	3.03	(1)
CALIFORNIA REDWOOD	0% moisture	22.0	75	0.66	1.53	(4)
	8% "	28.0	75	0.70	1.43	(4)
	8% "	22.0	75	0.70	1.43	(4)
	16% "	28.0	75	0.75	1.33	(4)
	16% "	22.0	75	0.74	1.35	(4)
	16% "	28.0	75	0.80	1.25	(4)
CYPRESS	0% moisture	28.7	86	0.67	1.49	(1)
	0% "	34.0	75	0.61	1.64	(4)
	8% "	26.0	75	0.66	1.52	(4)
	8% "	34.0	75	0.75	1.33	(4)
	16% "	26.0	75	0.76	1.32	(4)
	16% "	34.0	75	0.82	1.22	(4)
DOUGLAS FIR	0% moisture	22.0	75	0.60	1.67	(4)
	0% "	30.0	75	0.76	1.32	(4)
	8% "	22.0	75	0.63	1.59	(4)
	8% "	30.0	75	0.81	1.23	(4)
	16% "	22.0	75	0.67	1.49	(4)
	16% "	30.0	75	0.85	1.18	(4)
EASTERN HEMLOCK						
	0% moisture	22.0	75	0.60	1.67	(4)
	0% "	30.0	75	0.76	1.32	(4)
	8% "	22.0	75	0.63	1.59	(4)
	8% "	30.0	75	0.81	1.23	(4)
	16% "	22.0	75	0.67	1.49	(4)
	16% "	30.0	75	0.85	1.18	(4)

For notes see Page 107.

CHAPTER 5—HEAT TRANSMISSION COEFFICIENTS AND TABLES

TABLE 2. CONDUCTIVITIES (k) AND CONDUCTANCES (C) 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)	RESISTIVITY ($\frac{1}{k}$) OR RESISTANCE (R)	AUTHORITY
WOODS—Continued						
HARD MAPLE	0% moisture	40.0	75	1.01	0.99	(4)
	0% "	46.0	75	1.05	0.95	(4)
	8% "	40.0	75	1.08	0.93	(4)
	8% "	46.0	75	1.13	0.89	(4)
	16% "	40.0	75	1.15	0.87	(4)
	16% "	46.0	75	1.21	0.83	(4)
LONGLEAF YELLOW PINE	0% moisture	30.0	75	0.76	1.32	(4)
	0% "	40.0	75	0.86	1.16	(4)
	8% "	30.0	75	0.83	1.21	(4)
	8% "	40.0	75	0.95	1.05	(4)
	16% "	30.0	75	0.89	1.12	(4)
	16% "	40.0	75	1.03	0.97	(4)
MAHOGANY	---	34.3	86	0.90	1.11	(1)
	---	44.3	86	1.10	0.91	(1)
	---	---	---	1.15*	0.87	(—)
MAPLE OR OAK	0% moisture	22.0	75	0.62	1.61	(4)
	0% "	32.0	75	0.74	1.35	(4)
	8% "	22.0	75	0.68	1.47	(4)
	8% "	32.0	75	0.83	1.21	(4)
	16% "	22.0	75	0.74	1.35	(4)
	16% "	32.0	75	0.91	1.10	(4)
NORWAY PINE	0% moisture	22.0	75	0.67	1.49	(4)
	0% "	32.0	75	0.79	1.27	(4)
	8% "	22.0	75	0.71	1.41	(4)
	8% "	32.0	75	0.84	1.19	(4)
	16% "	22.0	75	0.74	1.35	(4)
	16% "	32.0	75	0.90	1.11	(4)
RED CYPRESS	0% moisture	38.0	75	0.98	1.02	(4)
	0% "	48.0	75	1.18	0.85	(4)
	8% "	38.0	75	1.03	0.97	(4)
	8% "	48.0	75	1.24	0.81	(4)
	16% "	38.0	75	1.07	0.94	(4)
	16% "	48.0	75	1.29	0.78	(4)
RED OAK	0% moisture	26.0	75	0.74	1.35	(4)
	0% "	36.0	75	0.91	1.10	(4)
	8% "	26.0	75	0.79	1.27	(4)
	8% "	36.0	75	0.97	1.03	(4)
	16% "	26.0	75	0.84	1.19	(4)
	16% "	36.0	75	1.04	0.96	(4)
SHORTLEAF YELLOW PINE	0% moisture	28.0	75	0.73	1.37	(4)
	0% "	34.0	75	0.88	1.13	(4)
	8% "	28.0	75	0.77	1.30	(4)
	8% "	34.0	75	0.93	1.08	(4)
	16% "	28.0	75	0.81	1.24	(4)
	16% "	34.0	75	0.97	1.03	(4)
SOFT ELM	0% moisture	36.0	75	0.89	1.12	(4)
	0% "	42.0	75	0.95	1.05	(4)
	8% "	36.0	75	0.96	1.04	(4)
	8% "	42.0	75	1.02	0.98	(4)
	16% "	36.0	75	1.01	0.99	(4)
	16% "	42.0	75	1.09	0.92	(4)
SUGAR PINE	0% moisture	22.0	75	0.54	1.85	(4)
	0% "	28.0	75	0.64	1.56	(4)
	8% "	22.0	75	0.59	1.70	(4)
	8% "	28.0	75	0.71	1.41	(4)
	16% "	22.0	75	0.65	1.54	(4)
	16% "	28.0	75	0.78	1.28	(4)
VIRGINIA PINE	---	34.3	86	0.96	1.04	(1)
	---	22.0	75	0.68	1.47	(4)
	0% moisture	30.0	75	0.79	1.27	(4)
	0% "	22.0	75	0.73	1.37	(4)
	8% "	30.0	75	0.85	1.18	(4)
	8% "	22.0	75	0.78	1.28	(4)
WEST COAST HEMLOCK	0% moisture	30.0	75	0.91	1.10	(4)
	0% "	31.2	86	0.78	1.28	(1)
	8% "	---	---	1.00	1.00	(3)
	8% "	---	---	0.80*	1.25	(—)
	16% "	---	---	---	---	---
	16% "	---	---	---	---	---
WHITE PINE						
YELLOW PINE						
YELLOW PINE OR FIR						

For notes see Page 107.