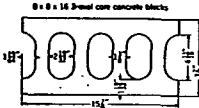
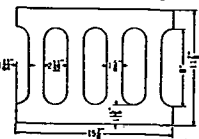
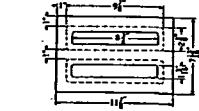
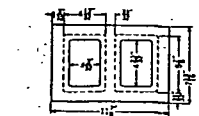


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TABLE 2. CONDUCTIVITIES (*k*) AND CONDUCTANCES (*C*) OF BUILDING MATERIALS AND INSULATORS^a—Continued

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 ($\frac{1}{k}$) OR RESISTANCE ($\frac{1}{C}$)	AUTHORITY
	Cement	Fine Aggre- gate 0-No. 4	Coarse Aggre- gate No. 4-1/4	Slump	Per Cent					
MASONRY MATERIALS										
—Continued										
STREAM TREATED LIMESTONE SLAG.	1	7.00	Fineness Modulus 3.75		27.1	74.6	74.49	2.27	0.44	(4)
PUMICE MINED IN CALIF.	1	8.00			26.5	65.0	74.68	2.42	0.41	(4)
BY-PRODUCT OF MANUFACTURE OF PHOSPHATES	1	8.00			25.5	86.6	74.62	3.19	0.31	(4)
	1	8.00			21.1	91.1	74.43	3.42	0.29	(4)
EXPANDED BURNED CLAY	1	8.00			18.4	57.9	75.57	2.28	0.44	(4)
BURNED CLAY AGGREGATE	1	8.50			21.8	67.1	75.89	2.89	0.35	(4)
BURNED CLAY AGGREGATE	1	8.50			21.8	67.1	74.60	2.82	0.35	(4)
	Sand and gravel aggregate					126.4	40	0.90†	1.11	(4)
	Sand and gravel aggregate used for calcu- lations						40	1.00†*	1.00	(4)
	Cores filled with 5.14 lb density cork						40	0.56†*	1.79	(4)
	Crushed limestone aggregate					134.3	40	0.86†*	1.16	(4)
	Cinder aggregate					86.2	40	0.58†*	1.73	(4)
	Cinder aggregate used for calculations						40	0.60†*	1.66	(4)
	Cores filled with 69.7 lb density cinders						40	0.39†	2.56	(4)
	Cores filled with 5.12 lb density cork						40	0.25†*	4.00	(4)
	Cores filled with 14.2 lb density rock wool						40	0.27†*	3.70	(4)
	Burned clay aggregate					67.7	40	0.50†*	2.00	(4)
	Cores filled with 5.06 lb density cork						40	0.21†	4.76	(4)
	Expanded blast furnace slag aggregate, 60% fine, 40% coarse						40	0.49†	2.04	(4)
	Sand and gravel aggregate					124.9	40	0.78†	1.28	(4)
	Sand and gravel aggregate used for calcu- lations						40	0.80†*		(4)
	Cinder aggregate					86.2	40	0.53†*	1.88	(4)
	Cores filled with 5.24 lb density cork						40	0.24†*	4.16	(4)
	Burned clay aggregate					76.7	40	0.47†	2.13	(4)
	Cores filled with 5.6 lb density cork						40	0.17†*	5.88	(4)
	Cinder aggregate					100.0	40	1.00†	1.00	(4)
	Double wall with 1 in. air space between					100.0	40	0.36†	2.78	(4)
	1 in. space filled with 9.97 lb density rock wool					100.0	40	0.20†	5.00	(4)
	5 x 8 x 12 block sand and gravel aggregate					133.7	40	0.38†	2.63	(4)
	5 x 8 x 12 block sand and gravel aggregate ^b					134.0	40	0.95†	1.15	(4)

For notes see page 97.

CHAPTER 4. HEAT TRANSMISSION COEFFICIENTS

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 ($\frac{1}{k}$) OR RESISTANCE ($\frac{1}{C}$)	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)
	Flax fibers between strong paper/	3.40	90	0.25	4.00	(1)
	Chemically treated hog hair between kraft paper/	4.90	90	0.28	3.57	(1)
	Chemically treated hog hair between kraft paper and asbestos paper/	5.76	71	0.26	3.85	(3)
	Hair felt between layers of paper/	7.70	71	0.28	3.57	(3)
	Kapok between burlap or paper/	11.00	75	0.25	4.00	(3)
	Jute fiber/	1.00	90	0.24	4.17	(1)
	Ground paper between two layers, each 3/4-in. thick made up of two layers of kraft paper (sample 3/4-in. thick)	6.70	75	0.25	4.00	(3)
	Stitched and creped expanding fibrous blanket	12.1	75	0.40†	2.50	(4)
	Paper and asbestos fiber with emulsified asphalt binder	1.50	70	0.27	3.70	(3)
	Cotton insulating bat	4.2	94	0.28	3.57	(1)
		0.875	72	0.24	4.17	(3)
INSULATION—SEMI-RIGID TYPE						
FIBER						
	Felted cattle hair/	13.00	90	0.26	3.84	(1)
	Felted hair and asbestos/	11.00	90	0.26	3.84	(1)
	75% hair and 25% jute/	7.50	90	0.28	3.57	(1)
	50% hair and 50% jute/	6.30	90	0.27	3.70	(1)
	Jute/	6.10	90	0.26	3.85	(1)
	Felted jute and asbestos/	6.70	75	0.25	4.00	(3)
	Compressed peat moss	10.00	90	0.37	2.70	(1)
		11.00	70	0.26	3.84	(3)
INSULATION—LOOSE FILL OR BAT TYPE						
FIBER						
	Made from cell fibers/	1.90	75	0.23	4.35	(3)
	Fibrous material made from dolomite and silica	1.60	75	0.24	4.17	(3)
	Fibrous material made from slag	1.50	75	0.27	3.70	(3)
	Redwood bark	9.40	103	0.27	3.70	(1)
	Redwood bark	3.00	90	0.31	3.22	(1)
	Glass fibers 0.0003 in. to 0.0006 in. in diameter	5.00	75	0.26	3.84	(3)
GLASS WOOL		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)
	Expanded vermiculite, particle size -3+14	6.2	90	0.32	3.12	(3)
GYPSUM	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	
REGENERATED CORK	About 3/4-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)
SAWDUST	Various	12.00	90	0.41	2.44	(1)
SHAVINGS	Various from planer	8.50	90	0.41	2.44	(1)
	From maple, beech and birch (coarse)	13.20	90	0.36	2.78	(1)

For notes see Page 97.