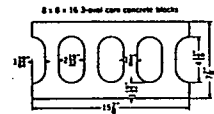
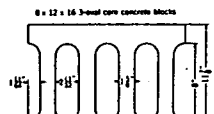
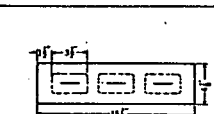
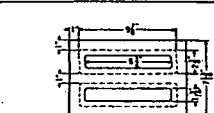
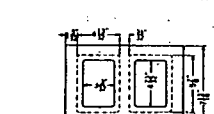


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TABLE 2. CONDUCTIVITIES (*k*) AND CONDUCTANCES (*C*) OF BUILDING MATERIALS AND INSULATORS^a—Continued

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 (D/F Fahr)	Conductivity (<i>k</i>) or Conductance (<i>C</i>)	Resistivity ($\frac{1}{k}$) or Resistance ($\frac{1}{C}$)	Authority
	Cement	Fine Aggregate No. 4	Coarse Aggregate No. 4- $\frac{1}{2}$	Slump	Per Cent Voids					
EXPANDED BURNED CLAY.....	1	8.00			18.4	57.9	75.57	2.28	0.44	(4)
STEAM TREATED LIMESTONE SLAG.....	1	7.00			27.1	74.6	74.49	2.27	0.44	(2)
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	Finesness Modulus 3.75		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)
HAYDITE.....	1	8.50			21.8	67.1	75.89	2.89	0.35	(4)
	1	8.50			21.8	67.1	74.60	2.815	0.34	(4)
	Sand and gravel aggregate.....					126.4	40	0.900†	1.11	(4)
	Sand and gravel aggregate used for calculations.....							1.000†	1.00	(4)
	Cores filled with 5.14 lb density cork.....						40	0.560†	1.79	(4)
	Crushed limestone aggregate.....					134.3	40	0.856†	1.17	(4)
	Cinder aggregate.....					86.2	40	0.577†	1.73	(4)
	Cinder aggregate used for calculations.....						40	0.600†	1.66	(4)
	Cores filled with 69.7 lb density cinders.....						40	0.390†	2.56	(4)
	Cores filled with 5.12 lb density cork.....						40	0.250†	4.00	(4)
	Cores filled with 14.2 lb density rock wool.....						40	0.266†	3.76	(4)
	Haydite aggregate.....					67.7	40	0.495†	2.02	(4)
	Cores filled with 5.06 lb density cork.....						40	0.206†	4.85	(4)
	Sand and gravel aggregate.....					124.9	40	0.777†	1.29	(4)
	Sand and gravel aggregate used for calculations.....							0.800†		(4)
	Cinder aggregate.....					86.2	40	0.531†	1.88	(4)
	Cores filled with 5.24 lb density cork.....						40	0.237†	4.22	(4)
	Haydite aggregate.....					76.7	40	0.468†	2.13	(4)
	Cores filled with 5.6 lb density cork.....						40	0.168†	5.94	(4)
	Cinder aggregate.....					100.0	40	1.00†	1.00	(4)
	Double wall with 1 in. air space between.....					100.0	40	0.358†	2.70	(4)
	1 in. space filled with 9.97 lb density rock wool.....					100.0	40	0.204†	4.90	(4)
	5 x 8 x 12 block sand and gravel aggregate.....					133.7	40	0.380†	2.63	(4)
	5 x 8 x 12 block sand and gravel aggregate ^b					134.0	40	0.947†	1.06	(4)

For notes see Page 95.

CHAPTER 5. HEAT TRANSMISSION COEFFICIENTS AND TABLES

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 (DAG FAHR)	CONDUCTIVITY (k) OR CONDUCTANCE (C)	RESISTIVITY ($\frac{1}{k}$) OR RESISTANCE ($\frac{1}{C}$)	AUTHORITY
MASONRY MATERIALS						
BRICK	Low density.....	---	---	5.00*	0.20	(2)
	High density.....	---	---	9.20*	0.11	
BRICKWORK	Damp or wet.....	---	---	5.00*	0.20	(2)
	Typical.....	---	---	12.00*	0.08	
CEMENT MORTAR	Typical.....	---	---	12.00*	0.08	(2)
	Various ages and mixes ^d	---	---	11.35 to 16.36	---	
CONCRETE	Cellular.....	40.0	75	1.06	0.94	(5)
	Cellular.....	50.0	75	1.44	0.69	(3)
	Cellular.....	60.0	75	1.80	0.56	(3)
	Cellular.....	70.0	75	2.18	0.46	(3)
CONCRETE	Typical fiber gypsum, 87.5% gypsum and 12.5% wood chips.....	51.2	74	1.66*	0.60	(4)
	Special concrete made with an aggregate of hardened clay—1-2-3 mix.....	101.0	70	3.98	0.25	(3)
STONE	Typical.....	---	---	12.50*	0.08	(2)
	Typical.....	---	---	12.00*	0.08	
STUCCO	Typical hollow clay (4 in.).....	---	---	1.00†	1.00	(2)
	Typical hollow clay (6 in.).....	---	---	0.64†	1.57	
TILE	Typical hollow clay (8 in.).....	---	---	0.60†	1.67	(2)
	Typical hollow clay (10 in.).....	---	---	0.58†	1.72	
TILE	Typical hollow clay (12 in.).....	---	---	0.40†	2.50	(2)
	Typical hollow clay (16 in.).....	---	---	0.31†	3.23	
TILE OR TERRAZZO	Hollow clay (2 in.) $\frac{1}{2}$ -in. plaster both sides.....	120.0	110	1.00†	1.00	(2)
	Hollow clay (4 in.) $\frac{1}{2}$ -in. plaster both sides.....	127.0	100	0.60†	1.67	
TILE OR TERRAZZO	Hollow clay (6 in.) $\frac{1}{2}$ -in. plaster both sides.....	124.3	105	0.47†	2.13	(2)
	Hollow gypsum (4 in.).....	---	---	0.46†	2.18	
TILE OR TERRAZZO	Solid gypsum.....	51.8	70	1.66	0.60	(4)
	Solid gypsum.....	75.6	76	2.96	0.34	
TILE OR TERRAZZO	Typical flooring.....	---	---	12.00*	0.08	(4)
	Typical flooring.....	---	---	12.00*	0.08	
INSULATION—BLANKET OR FLEXIBLE TYPES						
FIBER	Typical.....	---	---	0.27†	3.70	(3)
	Chemically treated wood fibers held between layers of strong paper.....	3.62	70	0.25	4.00	
FIBER	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	
FIBER	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	
FIBER	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	
FIBER	Jute fiber.....	1.00	90	0.24	4.17	(1)
	Ground paper between two layers, each $\frac{1}{2}$ -in. thick made up of two layers of kraft paper (sample $\frac{1}{2}$ -in. thick).....	6.70	75	0.25	4.00	
FIBER	Ground paper between two layers, each $\frac{1}{2}$ -in. thick made up of two layers of kraft paper (sample $\frac{1}{2}$ -in. thick).....	12.1	75	0.40†	2.50	(4)
	Ground paper between two layers, each $\frac{1}{2}$ -in. thick made up of two layers of kraft paper (sample $\frac{1}{2}$ -in. thick).....	12.1	75	0.40†	2.50	
INSULATION—SEMI-RIGID TYPE						
FIBER	Felted cattle hair.....	13.00	90	0.26	3.84	(1)
	Flax.....	11.00	90	0.26	3.84	
FIBER	Flax and rye.....	12.10	70	0.30	3.33	(3)
	Felted hair and asbestos.....	15.60	90	0.32	3.12	
FIBER	75% hair and 25% jute.....	7.80	90	0.28	3.57	(1)
	50% hair and 50% jute.....	6.30	90	0.27	3.70	
FIBER	Jute.....	6.10	90	0.26	3.85	(1)
	Felted jute and asbestos.....	6.70	75	0.25	4.00	
FIBER	Compressed peat moss.....	10.00	90	0.37	2.70	(1)
	Compressed peat moss.....	11.00	70	0.26	3.84	
INSULATION—LOOSE FILL OR BAT TYPE						
FIBER	Made from ceiba fibers.....	1.90	75	0.23	4.35	(3)
	Made from ceiba fibers.....	1.60	75	0.24	4.17	

For notes see page 95.