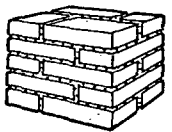
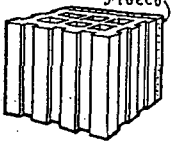
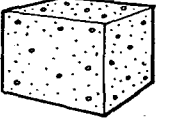
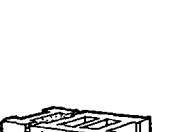
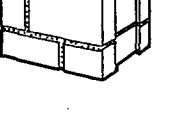
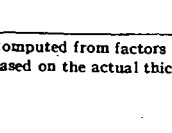


HEATING VENTILATING AIR CONDITIONING GUIDE 1942

TABLE 3. COEFFICIENTS OF TRANSMISSION (*U*) OF MASONRY WALLS*

Coefficients are expressed in Btu per hour per square foot per degree Fahrenheit difference in temperature between the air on the two sides, and are based on a wind velocity of 15 mph.

TYPICAL CONSTRUCTION	TYPE OF WALL	THICKNESS OF MASONRY (INCHES)	WALL No.
	Solid Brick Based on 4-in. hard brick and the remainder common brick.	8 12 16	1 2 3
	Hollow Tile Stucco Exterior Finish. The 8-in. and 10-in. tile figures are based on two cells in the direction of flow of heat. The 12-in. tile is based on three cells in the direction of flow of heat. The 16-in. tile consists of one 10-in. tile and one 6-in. tile each having two cells in the direction of heat flow.	8 10 12 16	4 5 6 7
	Limestone or Sandstone	8 12 16 24	8 9 10 11
	Concrete (Monolithic) These figures may be used with sufficient accuracy for concrete walls with stucco exterior finish.	6 10 16 20	12 13 14 15
	Cinder (Monolithic) Conductivity $k = 4.36$	6 10 16 20	16 17 18 19
	Burned Clay aggregate (Monolithic) Conductivity $k = 3.96$	6 10 16 20	20 21 22 23
	Cinder Blocks Cores filled with dry cinders, 69.7 lb per cu ft. Cores filled with granulated cork, 5.12 lb per cu ft. Cores filled with rock wool, 14.2 lb per cu ft. Based on one air cell in direction of heat flow. Cores filled with granulated cork, 5.24 lb per cu ft.	8 8 8 12 12	24 25 26 27 28 29
	Concrete Blocks Cores filled with granulated cork, 5.14 lb per cu ft. Based on one air cell in direction of heat flow.	8 8 12	30 31 32
	Burned Clay aggregate Blocks Cores filled with granulated cork, 5.06 lb per cu ft.	8 8	33 34
	Burned Clay aggregate Blocks Cores filled with granulated cork, 5.6 lb. per cu ft.	12 12	35 36

*Computed from factors marked by * in Table 2.

*Based on the actual thickness of 2 in. furring strips.

CHAPTER 4. HEAT TRANSMISSION COEFFICIENTS AND TABLES

INTERIOR FINISH											
UNINSULATED WALLS						INSULATED WALLS					
Plain walls—no interior finish	Plaster (1/4 in.) on walls	Plaster on wood lath—furred	Plaster (1/2 in.) on metal lath—furred	Plaster (1/2 in.) on plasterboard (1/2 in.)—furred	Decorated building board (1/2 in.) with-out plaster—furred	Plaster (1/2 in.) on rigid insulation (1/2 in.)—furred	Plaster (1/2 in.) on rigid insulation (1 in.)—furred	Plaster (1/2 in.) on corkboard (1 1/2 in.) set in cement mortar (1/4 in.)	Plaster (1/2 in.) on plasterboard (1/2 in.)—airspaced on one side with bright aluminum foil cemented to plasterboard	Plaster on metal lath attached to furring strips (2 in.)—rock wool fill (1 1/2 in.)	Plaster (1/2 in.) on metal lath attached to furring strips (2 in.)—flexible insulation (1/2 in.) between furring strips (one air space)
A	B	C	D	E	F	G	H	I	J	K	L
0.50 0.36 0.28	0.46 0.34 0.27	0.30 0.24 0.20	0.32 0.25 0.21	0.30 0.24 0.20	0.23 0.19 0.17	0.22 0.19 0.18	0.16 0.14 0.13	0.14 0.12 0.11	0.22 0.18 0.16	0.12 0.11 0.10	0.20 0.17 0.15
0.40 0.39 0.30 0.25	0.38 0.37 0.29 0.24	0.26 0.26 0.22 0.19	0.28 0.27 0.22 0.19	0.26 0.26 0.22 0.19	0.20 0.20 0.17 0.16	0.20 0.19 0.17 0.15	0.15 0.15 0.14 0.12	0.13 0.13 0.12 0.11	0.20 0.20 0.17 0.16	0.11 0.11 0.10 0.097	0.18 0.18 0.16 0.14
0.71 0.58 0.49 0.37	0.64 0.53 0.45 0.35	0.37 0.33 0.30 0.25	0.39 0.34 0.31 0.26	0.37 0.33 0.30 0.25	0.26 0.24 0.22 0.20	0.25 0.23 0.22 0.19	0.18 0.17 0.16 0.15	0.15 0.14 0.14 0.13	0.25 0.23 0.22 0.19	0.13 0.13 0.12 0.11	0.23 0.21 0.20 0.18
0.79 0.62 0.48 0.41	0.70 0.57 0.44 0.39	0.39 0.34 0.29 0.27	0.42 0.37 0.31 0.28	0.39 0.34 0.29 0.27	0.27 0.25 0.22 0.21	0.26 0.24 0.21 0.20	0.19 0.18 0.16 0.15	0.16 0.15 0.14 0.13	0.26 0.24 0.21 0.20	0.13 0.13 0.12 0.12	0.23 0.22 0.20 0.18
0.46 0.33 0.22 0.19	0.43 0.31 0.22 0.18	0.29 0.23 0.17 0.15	0.30 0.24 0.18 0.15	0.29 0.23 0.17 0.15	0.22 0.18 0.15 0.13	0.21 0.18 0.14 0.13	0.16 0.14 0.12 0.11	0.14 0.12 0.10 0.09	0.21 0.18 0.15 0.13	0.12 0.11 0.09 0.09	0.19 0.16 0.13 0.12
0.44 0.30 0.21 0.17	0.41 0.29 0.20 0.17	0.28 0.22 0.16 0.14	0.29 0.23 0.17 0.14	0.28 0.22 0.16 0.14	0.21 0.17 0.14 0.12	0.21 0.17 0.14 0.12	0.16 0.14 0.11 0.10	0.13 0.12 0.10 0.09	0.21 0.17 0.13 0.12	0.12 0.10 0.09 0.08	0.19 0.16 0.13 0.11
0.42 0.31	0.39 0.29	0.27 0.23	0.28 0.23	0.27 0.23	0.21 0.18	0.20 0.17	0.16 0.14	0.13 0.12	0.21 0.17	0.12 0.11	0.19 0.16
0.22 0.23 0.37	0.21 0.22 0.35	0.17 0.18 0.25	0.18 0.18 0.26	0.17 0.18 0.25	0.14 0.15 0.19	0.14 0.12 0.19	0.12 0.12 0.15	0.11 0.10 0.13	0.14 0.15 0.18	0.09 0.09 0.11	0.13 0.14 0.17
0.20	0.19	0.17	0.16	0.16	0.13	0.13	0.11	0.10	0.14	0.09	0.13
0.56	0.52	0.32	0.34	0.32	0.24	0.23	0.17	0.14	0.23	0.12	0.21
0.41 0.49	0.39 0.46	0.27 0.30	0.28 0.32	0.27 0.30	0.21 0.23	0.20 0.22	0.15 0.16	0.13 0.14	0.21 0.22	0.12 0.12	0.18 0.20
0.36	0.34	0.26	0.26	0.24	0.19	0.19	0.15	0.13	0.18	0.11	0.17
0.18	0.17	0.15	0.15	0.14	0.13	0.12	0.10	0.09	0.13	0.08	0.12
0.34	0.32	0.25	0.25	0.24	0.19	0.18	0.14	0.12	0.18	0.11	0.17
0.15	0.14	0.13	0.13	0.12	0.11	0.11	0.09	0.08	0.11	0.08	0.10

*A waterproof (not vaporproof) membrane should be provided between the outer material and the insulation fill to prevent possible wetting by absorption and a subsequent lowering of efficiency.