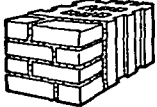
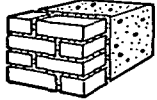
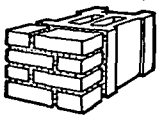
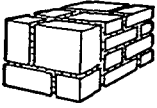
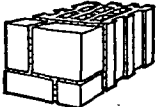
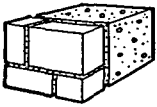


HEATING VENTILATING AIR CONDITIONING GUIDE 1942

TABLE 4. COEFFICIENTS OF TRANSMISSION (*U*) OF MASONRY WALLS WITH VARIOUS TYPES OF VENEERS^a

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		WALL No.
	FACING	BACKING	
	4 in. Brick Veneer ^a	6 in. Hollow Tile ^b	37
		8 in. Hollow Tile ^b	38
		10 in. Hollow Tile ^b	39
		12 in. Hollow Tile ^b	40
	4 in. Brick Veneer ^a	6 in. Concrete	41
		10 in. Concrete	42
		16 in. Concrete	43
	4 in. Brick Veneer ^a	8 in. Cinder Blocks	44
		8 in. Cinder Blocks—Cores filled with granulated cork, 5.12 lb per cu ft.	45
		12 in. Cinder Blocks	46
		12 in. Cinder Blocks—Cores filled with granulated cork, 5.24 lb per cu ft.	47
		8 in. Concrete Blocks	48
		8 in. Concrete Blocks—Cores filled with granulated cork, 5.14 lb per cu ft.	49
		12 in. Concrete Blocks	50
		8 in. Burned Clay aggregate Block	51
		8 in. Burned Clay aggregate Block—Cores filled with granulated cork, 5.06 lb per cu ft.	52
		12 in. Burned Clay aggregate Block—Cores filled with granulated cork, 5.6 lb per cu ft.	53
	4 in. Cut-Stone Veneer ^a	8 in. Common Brick	55
		12 in. Common Brick	56
		16 in. Common Brick	57
	4 in. Cut-Stone Veneer ^a	6 in. Hollow Tile ^b	58
		8 in. Hollow Tile ^b	59
		10 in. Hollow Tile ^b	60
		12 in. Hollow Tile ^b	61
	4 in. Cut-Stone Veneer ^a	6 in. Concrete	62
		10 in. Concrete	63
		16 in. Concrete	64

^aComputed from factors marked by * in Table 2.

^bBased on the actual thickness of 2-in. furring strips.

^cThe 6-in., 8-in. and 10-in. tile figures are based on two cells in the direction of heat flow. The 12-in. tile is based on three cells in the direction of heat flow.

CHAPTER 4. HEAT TRANSMISSION COEFFICIENTS AND TABLES

INTERIOR FINISH

UNINSULATED WALLS						INSULATED WALLS						
Plaster (1/2 in.) on exterior finish	Plaster (1/2 in.) on walls	Plaster on wood lath—furred	Plaster (1/2 in.) on metal lath—furred	Plaster (1/2 in.) on plaster-board (1/2 in.)—furred	No plaster—decorated rigid or building board interior finish (1/2 in.)—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 cork board (1 1/4 in.)—furred	Plaster (1/2 in.) on plaster-board (1/2 in.)—furred on one side with bright aluminum foil cemented to plaster-board	Plaster (1/2 in.) on metal lath attached to furring strips (2 in. x 4 in.)—rock wool fill (1 1/2 in.)	Plaster (1/2 in.) on metal lath attached to furring strips (2 in. x 4 in.)—flexible insulation (1/2 in.)—between furring strips (one air space)	
A	B	C	D	E	F	G	H	I	J	K	L	
0.36	0.34	0.24	0.25	0.24	0.19	0.19	0.15	0.13	0.18	0.11	0.17	
0.34	0.33	0.24	0.25	0.24	0.19	0.18	0.14	0.12	0.18	0.11	0.17	
0.34	0.32	0.23	0.24	0.23	0.19	0.18	0.14	0.12	0.18	0.11	0.17	
0.27	0.26	0.20	0.21	0.20	0.16	0.16	0.13	0.11	0.16	0.10	0.15	
0.57	0.53	0.33	0.35	0.33	0.24	0.23	0.17	0.14	0.23	0.13	0.21	
0.48	0.45	0.30	0.31	0.30	0.22	0.22	0.16	0.14	0.22	0.12	0.20	
0.39	0.37	0.26	0.27	0.26	0.20	0.19	0.15	0.13	0.20	0.11	0.18	
0.35	0.33	0.24	0.25	0.24	0.19	0.18	0.14	0.12	0.18	0.11	0.17	
0.20	0.19	0.16	0.16	0.16	0.13	0.13	0.11	0.10	0.13	0.09	0.12	
0.31	0.30	0.22	0.23	0.22	0.18	0.17	0.14	0.12	0.17	0.11	0.16	
0.18	0.18	0.15	0.15	0.15	0.13	0.12	0.10	0.09	0.13	0.08	0.12	
0.44	0.42	0.28	0.30	0.28	0.21	0.21	0.16	0.13	0.21	0.12	0.19	
0.34	0.32	0.24	0.25	0.23	0.19	0.18	0.14	0.12	0.18	0.11	0.17	
0.40	0.38	0.26	0.28	0.26	0.20	0.20	0.15	0.13	0.20	0.11	0.18	
0.31	0.29	0.23	0.23	0.22	0.18	0.17	0.14	0.12	0.17	0.11	0.16	
0.17	0.16	0.14	0.14	0.14	0.12	0.12	0.10	0.09	0.12	0.08	0.11	
0.29	0.28	0.21	0.22	0.21	0.17	0.17	0.13	0.12	0.17	0.10	0.16	
0.14	0.14	0.12	0.12	0.12	0.10	0.10	0.09	0.08	0.10	0.07	0.10	
0.37	0.35	0.25	0.26	0.25	0.19	0.19	0.15	0.13	0.19	0.11	0.17	
0.28	0.27	0.21	0.21	0.21	0.17	0.16	0.13	0.12	0.17	0.10	0.15	
0.23	0.22	0.18	0.18	0.18	0.15	0.14	0.12	0.11	0.15	0.095	0.14	
0.37	0.35	0.25	0.26	0.25	0.20	0.19	0.15	0.13	0.19	0.11	0.18	
0.36	0.34	0.24	0.25	0.24	0.19	0.19	0.15	0.13	0.18	0.11	0.17	
0.35	0.33	0.24	0.25	0.24	0.19	0.18	0.14	0.12	0.18	0.11	0.17	
0.28	0.26	0.20	0.21	0.20	0.17	0.16	0.13	0.11	0.17	0.10	0.15	
0.61	0.56	0.34	0.36	0.34	0.25	0.24	0.18	0.15	0.24	0.13	0.22	
0.51	0.47	0.31	0.32	0.31	0.23	0.22	0.17	0.14	0.22	0.12	0.20	
0.41	0.38	0.26	0.28	0.26	0.20	0.20	0.15	0.13	0.20	0.11	0.18	

^aCalculations include cement mortar (1/2 in.) between veneer or facing and backing.

^bBased on one air cell in direction of heat flow.

^cA 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.