TABLE 7. COEFFICIENTS OF TRANSMISSION (*U*) OF FRAME WALLS WITH INSULATION BETWEEN FRAMING[a, b]

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

COEFFICIENT WITH *NO* INSULATION BETWEEN FRAMING	COEFFICIENT WITH INSULATION BETWEEN FRAMING: MINERAL WOOL OR VEGETABLE FIBERS IN BLANKET OR BAT FORM[c] (Thickness below)				NUMBER
	1 IN.	2 IN.	3 IN.	3½ IN. MINERAL WOOL BETWEEN FRAMING[d]	
	A	B	C	D	
0.11	0.078	0.063	0.054	0.051	33
0.12	0.083	0.067	0.056	0.053	34
0.13	0.088	0.070	0.058	0.055	35
0.14	0.092	0.072	0.061	0.057	36
0.15	0.097	0.075	0.063	0.059	37
0.16	0.10	0.078	0.064	0.060	38
0.17	0.10	0.080	0.066	0.062	39
0.18	0.11	0.082	0.067	0.063	40
0.19	0.11	0.084	0.069	0.065	41
0.20	0.12	0.086	0.070	0.066	42
0.21	0.12	0.088	0.072	0.067	43
0.22	0.12	0.089	0.073	0.068	44
0.23	0.12	0.091	0.074	0.069	45
0.24	0.13	0.093	0.075	0.070	46
0.25	0.13	0.094	0.076	0.071	47
0.26	0.13	0.096	0.077	0.072	48
0.27	0.14	0.097	0.078	0.073	49
0.28	0.14	0.098	0.079	0.073	50
0.29	0.14	0.10	0.080	0.075	51
0.30	0.14	0.10	0.080	0.075	52
0.31	0.14	0.10	0.081	0.076	53
0.32	0.15	0.10	0.082	0.077	54
0.33	0.15	0.10	0.083	0.077	55
0.34	0.15	0.10	0.083	0.078	56
0.35	0.15	0.11	0.084	0.078	57
0.36	0.15	0.11	0.085	0.079	58
0.37	0.16	0.11	0.085	0.080	59
0.38	0.16	0.11	0.086	0.080	60
0.39	0.16	0.11	0.086	0.081	61
0.40	0.16	0.11	0.087	0.082	62
0.41	0.16	0.11	0.087	0.082	63
0.42	0.16	0.11	0.088	0.082	64
0.43	0.17	0.11	0.088	0.082	65
0.44	0.17	0.11	0.089	0.083	66

[a] This table may be used for determining the coefficients of transmission of frame constructions with the types and thicknesses of insulation indicated in Columns A to D inclusive between framing. Columns A, B and C may be used for walls, ceilings or roofs with only one air space between framing but are not applicable to ceilings with *no* flooring above. (See Table 12.) Column D is applicable to walls only. *Example:* Find the coefficient of transmission of a frame wall consisting of wood siding, ½ in. insulating board sheathing, studs, gypsum lath and plaster, with 2 in. blanket insulation between studs. According to Table 6, a wall of this construction with *no insulation* between studs has a coefficient of 0.19 (Wall No. 4D). Referring to Column B above, it will be found that a wall of this value with 2 in. blanket insulation between the studs has a coefficient of 0.084.

[b] Coefficients corrected for 2 x 4 framing, 16 in. on centers—15 percent of surface area.

[c] Based on one air space between framing.

[d] No air space.

TABLE 8. COEFFICIENTS OF TRANSMISSION (*U*) OF MASONRY WALLS

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

TYPE OF MASONRY	THICKNESS OF MASONRY INCHES	INTERIOR FINISH (PLUS INSULATION WHERE INDICATED): A Plain Walls—No Interior Finish	B Plaster (½ in.) on Walls	C Metal Lath and Plaster[f] Furred[h]	D Gypsum Board (⅜ in.) Decorated—Furred[h]	E Gypsum Lath (⅜ in.) Plastered—Furred[h]	F Insulating Board (½ in.) Plain or Decorated—Furred[h]	G Insulating Board (½ in.) Plastered[g]—Furred[h]	H Insulating Board Lath (½ in.) Plastered—Furred[h]	I Gypsum Lath[e] Plastered Plus 1 in. Blanket Insulation—Furred[h]	WALL NUMBER
		A	B	C	D	E	F	G	H	I	
SOLID[a] BRICK	8	0.50	0.46	0.32	0.31	0.30	0.23	0.22	0.16	0.14	67
	12	0.36	0.34	0.25	0.25	0.24	0.19	0.19	0.14	0.13	68
	16	0.28	0.27	0.21	0.21	0.20	0.17	0.16	0.13	0.12	69
HOLLOW[b] TILE (Stucco Exterior Finish)	8	0.40	0.37	0.27	0.27	0.26	0.20	0.20	0.15	0.13	70
	10	0.39	0.37	0.27	0.27	0.26	0.20	0.19	0.15	0.13	71
	12	0.30	0.28	0.22	0.22	0.21	0.17	0.17	0.13	0.12	72
	16	0.24	0.24	0.19	0.19	0.18	0.15	0.15	0.12	0.11	73
STONE[c]	8	0.70	0.64	0.39	0.38	0.36	0.26	0.25	0.18	0.16	74
	12	0.57	0.53	0.35	0.34	0.33	0.24	0.23	0.17	0.15	75
	16	0.49	0.45	0.31	0.31	0.29	0.22	0.22	0.16	0.14	76
	24	0.37	0.35	0.26	0.26	0.25	0.19	0.19	0.15	0.13	77
POURED CONCRETE[d]	6	0.79	0.71	0.42	0.41	0.39	0.27	0.26	0.19	0.16	78
	8	0.70	0.64	0.39	0.38	0.36	0.26	0.25	0.18	0.16	79
	10	0.63	0.58	0.37	0.36	0.34	0.25	0.24	0.18	0.15	80
	12	0.57	0.53	0.35	0.34	0.33	0.24	0.23	0.17	0.15	81
HOLLOW CONCRETE BLOCKS	**Gravel Aggregate**										
	8	0.56	0.52	0.34	0.34	0.32	0.24	0.23	0.17	0.15	82
	12	0.49	0.46	0.32	0.31	0.30	0.22	0.22	0.16	0.14	83
	Cinder Aggregate										
	8	0.41	0.39	0.28	0.28	0.27	0.21	0.20	0.15	0.13	84
	12	0.38	0.36	0.26	0.26	0.25	0.20	0.19	0.15	0.13	85
	Light Weight Aggregate[e]										
	8	0.36	0.34	0.26	0.25	0.24	0.19	0.19	0.15	0.13	86
	12	0.34	0.33	0.25	0.24	0.24	0.19	0.18	0.14	0.13	87

[a] Based on 4 in. hard brick and remainder common brick.

[b] The 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. The 16 in. tile consists of one 10 in. and one 6 in. tile, each having two cells in the direction of heat flow.

[c] Limestone or sandstone.

[d] These figures may be used with sufficient accuracy for concrete walls with stucco exterior finish.

[e] Expanded slag, burned clay or pumice.

[f] Thickness of plaster assumed ¾ in.

[g] Thickness of plaster assumed ½ in.

[h] Based on 2 in. furring strips; one air space.