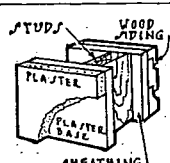
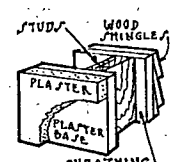
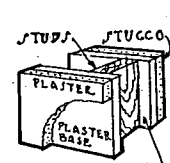
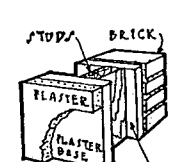


HEATING VENTILATING AIR CONDITIONING GUIDE 1939

TABLE 5. COEFFICIENTS OF TRANSMISSION (*U*) OF VARIOUS TYPES OF FRAME CONSTRUCTION*

These 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	EXTERIOR FINISH	TYPE OF SHEATHING	Wall No.
	Wood Siding or Clapboard	1 in. Wood ^d	65
		3/4 in. Rigid Insulation	66
		1/2 in. Plaster Board	67
	Wood Shingles	1 in. Wood ^d	68
		3/4 in. Rigid Insulation ^a	69
		1/2 in. Plaster Board ^a	70
	Stucco	1 in. Wood ^d	71
		3/4 in. Rigid Insulation	72
		1/2 in. Plaster Board	73
	Brick/Veneer	1 in. Wood ^d	74
		3/4 in. Rigid Insulation	75
		1/2 in. Plaster Board	76

*Computed from factors marked by * in Table 2.

^bThese coefficients may also be used with sufficient accuracy for plaster on wood lath or plaster on plaster board.

^cBased on the actual width of 2 by 4-in. studding, namely, 3 3/4 in.

CHAPTER 5. HEAT TRANSMISSION COEFFICIENTS AND TABLES

INTERIOR FINISH

NO INSULATION BETWEEN STUDDING								INSULATION BETWEEN STUDDING				
Plaster on wood lath on studding	Plaster (3/4 in.) on metal lath on studding	Plaster (1/2 in.) on plaster board (3/4 in.) on studding	Plaster (1/2 in.) on rigid insulation (3/4 in.) on studding	Plaster (1/2 in.) on rigid insulation (1 in.) on studding	Plaster (1/2 in.) on corkboard (1 1/2 in.) on studding	No plaster—decorated rigid or building board interior finish (3/4 in.)	1 in. wood sheathing & furring strips, plaster (1/2 in.) on wood lath	Plaster (3/4 in.) on metal lath—stud space faced one side with bright aluminum foil	Plaster (3/4 in.) on metal lath ^b on studding—flexible insulation (3/4 in.) between studding and in contact with sheathing	Plaster (3/4 in.) on metal lath ^b on studding—flexible insulation (1/2 in.) between studding—2 air spaces	Plaster (3/4 in.) on metal lath ^b on studding—flexible insulation (1 in.) between studding—2 air spaces	Plaster (3/4 in.) on metal lath ^b on studding—rock wool fill (3 3/4 in.) between studding ^a
A	B	C	D	E	F	G	H	I	J	K	L	M
0.25	0.26	0.25	0.19	0.15	0.11	0.19	0.17	0.19	0.17	0.15	0.12	0.072
0.19	0.20	0.19	0.16	0.13	0.10	0.16	0.14	0.16	0.15	0.13	0.10	0.068
0.31	0.33	0.31	0.22	0.17	0.13	0.23	0.19	0.24	0.20	0.17	0.13	0.076
0.25	0.26	0.25	0.19	0.15	0.11	0.19	0.17	0.20	0.17	0.15	0.12	0.072
0.17	0.17	0.17	0.14	0.11	0.092	0.14	0.14	0.14	0.13	0.11	0.094	0.064
0.24	0.25	0.24	0.19	0.15	0.11	0.19	0.19	0.19	0.17	0.15	0.12	0.071
0.30	0.32	0.30	0.22	0.16	0.12	0.22	0.19	0.23	0.20	0.17	0.13	0.076
0.22	0.23	0.22	0.17	0.14	0.11	0.19	0.15	0.18	0.16	0.14	0.11	0.071
0.40	0.43	0.40	0.26	0.19	0.14	0.28	0.22	0.29	0.24	0.20	0.14	0.081
0.27	0.28	0.27	0.20	0.15	0.12	0.21	0.17	0.21	0.18	0.16	0.12	0.074
0.21	0.21	0.21	0.16	0.14	0.10	0.17	0.15	0.17	0.15	0.13	0.11	0.068
0.35	0.37	0.35	0.24	0.18	0.13	0.25	0.21	0.26	0.22	0.18	0.14	0.079

^aYellow pine or fir—actual thickness about 3 3/4 in.

^bFurring strips between wood shingles and sheathing.

^cSmall air space and mortar between building paper and brick veneer neglected.

^dA waterproof membrane should be provided between the outer material and the insulation fill to prevent possible wetting by absorption and a subsequent lowering of efficiency.

^eStud and rock wool fill areas combined.