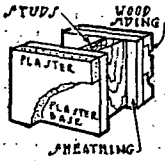
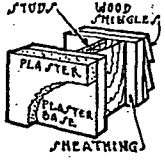
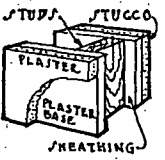
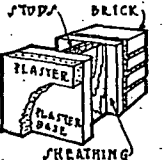


HEATING VENTILATING AIR CONDITIONING GUIDE 1943

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

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
		2 1/2 in. Rigid Insulation	66
		1/2 in. Plasterboard	67
	Wood Shingles	1 in. Wood ^d	68
		2 1/2 in. Rigid Insulation [*]	69
		1/2 in. Plasterboard [*]	70
	Stucco	1 in. Wood ^d	71
		2 1/2 in. Rigid Insulation	72
		1/2 in. Plasterboard	73
	Brick/Veneer	1 in. Wood ^d	74
		2 1/2 in. Rigid Insulation	75
		1/2 in. Plasterboard	76

^aComputed from factors marked by * in Table 2.

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

^cBased on the actual width of 2 by 4-in. studs, namely, 3 5/8 in.

CHAPTER 4 HEAT TRANSMISSION COEFFICIENTS

INTERIOR FINISH

NO INSULATION BETWEEN STUDDING								INSULATION BETWEEN STUDDING				
A	B	C	D	E	F	G	H	I	J	K	L	M
Plaster on wood lath on studs	Plaster (1/2 in.) on metal lath on studs	Plaster (1/2 in.) on plasterboard (1/2 in.) on studs	Plaster (1/2 in.) on rigid insulation (1/2 in.) on studs	Plaster (1/2 in.) on rigid insulation (1 in.) on studs	Plaster (1/2 in.) on corkboard (1 1/4 in.) on studs	No plaster—decorated rigid or building board interior finish (1/4 in.) on studs	1 in. wood sheathing ^d furring strips, plaster (1/2 in.) on wood lath	Plaster (1/2 in.) on plasterboard (1/2 in.)—air space faced on one side with bright aluminum foil cemented to plasterboard	Plaster (1/2 in.) on metal lath on studs—flexible insulation (1/2 in.) between studs and in contact with sheathing	Plaster (1/2 in.) on metal lath on studs—flexible insulation (1/2 in.) between studs—2 air spaces	Plaster (1/2 in.) on metal lath on studs—flexible insulation (1 in.) between studs—2 air spaces	Plaster (1/2 in.) on metal lath on studs—flexible insulation (1 in.) between studs—2 air spaces
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	0.15	0.13	0.10	0.16	0.14	0.15	0.15	0.13	0.10	0.068
0.31	0.33	0.31	0.22	0.17	0.13	0.23	0.19	0.22	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	0.15	0.13	0.11	0.094	0.064
0.24	0.25	0.24	0.19	0.15	0.11	0.19	0.19	0.22	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	0.17	0.16	0.14	0.11	0.071
0.40	0.43	0.40	0.26	0.19	0.14	0.28	0.22	0.26	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	0.16	0.15	0.13	0.11	0.068
0.35	0.37	0.35	0.24	0.18	0.13	0.25	0.21	0.24	0.22	0.18	0.14	0.079

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

^bFurring strips between wood shingles and sheathing.

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

^dA 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.

^eThe coefficients in this column are corrected for the effect of studs.