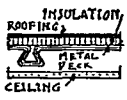
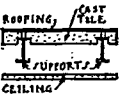
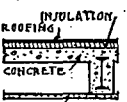
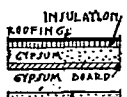
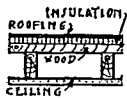


TABLE 16. COEFFICIENTS OF TRANSMISSION (*U*) OF FLAT ROOFS COVERED WITH BUILT-UP ROOFING, WITH LATH AND PLASTER CEILINGS^a

(See Table 15 for Flat Roofs with No Ceilings)

These 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 ROOF DECK	THICK- NESS OF ROOF DECK (INCHES)	NO IN- SULA- TION	INSULATION ON TOP OF DECK (COVERED WITH BUILT-UP ROOFING)								NUM- BER
			INSULATING BOARD (Thickness Below)					CORKBOARD (Thickness Below)			
			$\frac{1}{2}$ In.	$\frac{1}{4}$ In.	$\frac{1}{2}$ In.	$\frac{1}{4}$ In.	$\frac{1}{2}$ In.	$\frac{1}{4}$ In.	$\frac{1}{2}$ In.		
			A	B	C	D	E	F	G	H	
Flat Metal Roof Deck 		0.46	0.27	0.19	0.15	0.12	0.18	0.14	0.11	12	
Precast Cement Tile 	1½ in.	0.43	0.26	0.19	0.15	0.12	0.18	0.14	0.11	13	
Concrete 	2 in. 4 in. 6 in.	0.42 0.40 0.37	0.26 0.25 0.24	0.19 0.18 0.18	0.14 0.14 0.14	0.12 0.12 0.11	0.18 0.17 0.17	0.14 0.13 0.13	0.11 0.11 0.11	14 15 16	
Gypsum Fiber Concrete ^b on ½ in. Gypsum Board 	2½ in. 3½ in.	0.27 0.23	0.19 0.17	0.15 0.14	0.12 0.11	0.10 0.097	0.14 0.13	0.12 0.11	0.097 0.091	17 18	
Wood ^c 	1 in. 1½ in. 2 in. 3 in.	0.31 0.26 0.24 0.18	0.21 0.19 0.17 0.14	0.16 0.15 0.14 0.12	0.13 0.12 0.11 0.10	0.11 0.10 0.097 0.087	0.15 0.14 0.13 0.11	0.12 0.11 0.11 0.095	0.10 0.095 0.092 0.082	19 20 21 22	

^a Calculations based on metal lath and plaster ceilings, but coefficients may be used with sufficient accuracy for gypsum lath or wood lath and plaster ceilings. It is assumed that there is an air space between the under side of the roof deck and the upper side of the ceiling.^b 87½ percent gypsum, 12½ percent wood fiber. Thickness indicated includes ½ in. gypsum board.^c Nominal thicknesses specified—actual thicknesses used in calculations.TABLE 17. COEFFICIENTS OF TRANSMISSION (*U*) OF PITCHED ROOFS
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 CEILING (Assumed Directly to Roof Rafters)	INSULATION BETWEEN RAFTERS											
	WOOD SHINGLES (ON 1 x 4 WOOD STRIPS SPACED 2 IN. APART)				ASPHALT SHINGLES OR ROLL ROOFING (ON SOLD WOOD SHINGLES) ^d				SLATE OR TILE (ON SOLD WOOD SHINGLES) ^e			
	INSULATION BETWEEN RAFTERS				INSULATION BETWEEN RAFTERS				INSULATION BETWEEN RAFTERS			
	Blanket or Bat (Thickness Below)				Blanket or Bat (Thickness Below)				Blanket or Bat (Thickness Below)			
No Ceiling Applied to Rafters	None	1 in.	2 in.	3 in.	None	1 in.	2 in.	3 in.	None	1 in.	2 in.	3 in.
	A	B	C	D	E	F	G	H	I	J	K	L
	0.48 ^f	0.15	0.10	0.081	0.29 ^f	0.15	0.11	0.084	0.53 ^f	0.16	0.11	0.083
	0.31	0.14	0.10	0.081	0.33	0.15	0.10	0.083	0.34	0.15	0.10	0.083
Metal Lath and Plaster ^d Gypsum Board (½ in.) Decorated Wood Lath and Plaster ^e Gypsum Lath (½ in.) Plastered ^f	0.30	0.14	0.10	0.080	0.32	0.15	0.10	0.082	0.33	0.15	0.10	0.083
	0.29	0.14	0.10	0.080	0.31	0.14	0.10	0.081	0.32	0.15	0.10	0.082
	0.29	0.14	0.10	0.079	0.31	0.14	0.10	0.081	0.32	0.15	0.10	0.082
	0.29	0.14	0.10	0.079	0.30	0.14	0.10	0.081	0.31	0.15	0.10	0.081
Plywood (¾ in.) Plain or Decorated Insulating Board (¾ in.) Plain or Decorated Insulating Board Lath (¾ in.) Plastered ^f Insulating Board Lath (1 in.) Plastered ^f	0.29	0.14	0.10	0.079	0.30	0.14	0.10	0.081	0.31	0.15	0.10	0.081
	0.22	0.12	0.090	0.072	0.23	0.12	0.091	0.074	0.24	0.13	0.092	0.074
	0.22	0.12	0.088	0.072	0.22	0.12	0.090	0.073	0.23	0.13	0.091	0.074
	0.19	0.10	0.078	0.064	0.17	0.10	0.079	0.065	0.17	0.10	0.080	0.066

^a Coefficients corrected for framing on basis of 15 percent area, 2 in. x 4 in. (nominal), 16 in. on centers.^b Figures in Columns I, J, K and L may be used with sufficient accuracy for rigid asbestos shingles on wood sheathing. Layer of slater's felt neglected.^c Sheathing and wood strips assumed ½ in. thick.^d Plaster assumed ½ in. thick.^e Plaster assumed ¾ in. thick.^f No air space included in 1-A, 1-E or 1-I; all other coefficients based on one air space.