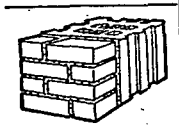
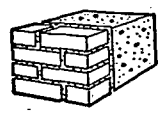
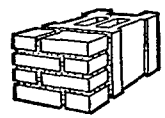
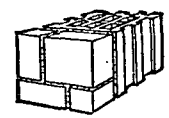
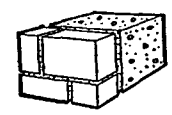
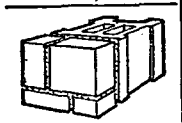
Table 9. Coefficients of Transmission (U) of Brick and Stone Veneer Masonry Walls*

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.

Typical Construction	Facing	Backing	Interior Finish (Plus Insulation Where Indicated): Plain Walls—no Interior Finish	Plaster (½ in.) on Walls	Metal Lath and Plaster—Furred[e]	Gypsum Board (⅜ in.) Decorated—Furred[e]	Gypsum Lath (⅜ in.) Plastered[f]—Furred[e]	Insulating Board (½ in.) Plain or Decorated—Furred[e]	Insulating Board Lath (½ in.) Plastered[f]—Furred[e]	Insulating Board Lath (1 in.) Plastered[f]—Furred[e]	Gypsum Lath Plastered[f] Plus 1 in. Blanket Insulation—Furred[e]	Wall Number
			A	B	C	D	E	F	G	H	I	
	4 in. Brick Veneer[a]	6 in. Hollow Tile[b]	0.35	0.34	0.25	0.25	0.24	0.19	0.18	0.14	0.13	88
		8 in. Hollow Tile[b]	0.34	0.32	0.25	0.24	0.23	0.19	0.18	0.14	0.13	89
		6 in. Concrete	0.59	0.54	0.35	0.35	0.33	0.24	0.23	0.17	0.15	90
		8 in. Concrete	0.54	0.50	0.33	0.33	0.31	0.23	0.23	0.17	0.15	91
		8 in. Concrete Blocks[c] (Gravel Aggregate)	0.44	0.41	0.29	0.29	0.28	0.21	0.21	0.16	0.14	92
		8 in. Concrete Blocks[c] (Cinder Aggregate)	0.34	0.33	0.25	0.24	0.24	0.19	0.18	0.14	0.13	93
		8 in. Concrete Blocks[c] (Light Weight Aggregate)[d]	0.31	0.29	0.23	0.23	0.22	0.18	0.17	0.14	0.12	94
	4 in. Cut Stone Veneer[a]	6 in. Hollow Tile[b]	0.37	0.35	0.26	0.26	0.25	0.19	0.19	0.15	0.13	95
		8 in. Hollow Tile[b]	0.36	0.34	0.25	0.25	0.24	0.19	0.19	0.14	0.13	96
		6 in. Concrete	0.63	0.58	0.37	0.36	0.34	0.25	0.24	0.18	0.15	97
		8 in. Concrete	0.57	0.53	0.35	0.34	0.33	0.24	0.23	0.17	0.15	98
		8 in. Concrete Blocks[c] (Gravel Aggregate)	0.47	0.44	0.30	0.30	0.29	0.22	0.21	0.16	0.14	99
		8 in. Concrete Blocks[c] (Cinder Aggregate)	0.36	0.34	0.25	0.25	0.24	0.19	0.19	0.15	0.13	100
		8 in. Concrete Blocks[c] (Light Weight Aggregate)[d]	0.32	0.30	0.23	0.23	0.22	0.18	0.17	0.14	0.12	101

(See text p. 186). * See Table 5, Note a.

[a] Calculation based on ½ in. cement mortar between backing and facing, except in the case of the concrete backing which is assumed to be poured in place.

[b] The hollow tile figures are based on two air cells in the direction of heat flow.

[c] Hollow concrete blocks.

[d] Expanded slag, burned clay or pumice.

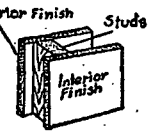
[e] Thickness of plaster assumed ½ in.

[f] Thickness of plaster assumed ½ in.

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

Table 10. Coefficients of Transmission (U) of Frame Partitions or Interior Walls[a]*

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 still air (no wind) conditions on both sides.

Interior Finish		Single Partition (Finish on one side only of studs)	Double Partition (Finish on both sides of studs): No Insulation between studs	Double Partition (Finish on both sides of studs): 1 in. Blanket[d] between studs. One air space.	Partition Number
		A	B	C	
Metal Lath and Plaster[b]		0.69	0.39	0.16	1
Gypsum Board (⅜ in.) Decorated		0.67	0.37	0.16	2
Wood Lath and Plaster		0.62	0.34	0.15	3
Gypsum Lath (⅜ in.) Plastered[c]		0.61	0.34	0.15	4
Plywood (⅜ in.) Plain or Decorated		0.59	0.33	0.15	5
Insulating Board (½ in.) Plain or Decorated		0.36	0.19	0.11	6
Insulating Board Lath (½ in.) Plastered[c]		0.35	0.18	0.11	7
Insulating Board Lath (1 in.) Plastered[c]		0.23	0.12	0.082	8

(See text p. 186.) * See Table 5 Note a.

[a] Coefficients not weighted; effect of studding neglected.

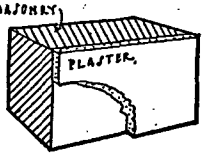
[b] Plaster assumed ½ in. thick.

[c] Plaster assumed ½ in. thick.

[d] For partitions with other insulations between studs refer to Table 6, using values in Column B of above table, in left-hand column of Table 6. *Example:* What is the coefficient of transmission (U) of a partition consisting of gypsum lath and plaster on both sides of studs with 2 in. blanket between studs? *Solution:* According to above table, this partition with no insulation between studs (No. 4B) has a coefficient of 0.34. Referring to Table 6, it will be found that a wall having a coefficient of 0.34 with no insulation between studs, will have a coefficient of 0.10 (approx.) with 2 in. of blanket insulation between studs (No. 56B).

Table 11. Coefficients of Transmission (U) of Masonry Partitions*

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 still air (no wind) conditions on both sides.

Type of Partition			Thickness of Masonry (Inches)	Type of Finish: No Finish (Plain walls)	Type of Finish: Plaster One Side	Type of Finish: Plaster Both Sides[a]	Partition Number
				A	B	C	
Hollow Clay Tile			3	0.50	0.47	0.43	9
			4	0.45	0.42	0.40	10
Hollow Gypsum Tile			3	0.35	0.33	0.32	11
			4	0.29	0.28	0.27	12
Hollow Concrete Tile or Blocks		Cinder Aggregate	3	0.50	0.47	0.43	13
			4	0.45	0.42	0.40	14
		Light Weight Aggregate[b]	3	0.41	0.39	0.37	15
			4	0.35	0.34	0.32	16
Common Brick			4	0.50	0.46	0.43	17

(See text p. 186). * See Table 5, Note a.

[a] 2 in. solid plaster partition, $U = 0.53$.

[b] Expanded slag, burned clay or pumice.