

TABLE 24. COEFFICIENTS OF TRANSMISSION (*U*) OF BRICK VENEER FRAME WALLS

Note.—These coefficients are expressed in Btu per hour per square foot per 1 deg Fahr difference in temperature between the air on the two sides and are based on an outside wind exposure of 15 miles per hour.

The values of <i>U</i> in this Table are based on the following internal conductivities or conductances which are expressed in B.t.u. per Hr. per Sq. Ft. per 1° F		Typical Construction	
Wood (Yellow Pine or Fir)	1.00 per 1"		4" Brick
Plaster (Gypsum)	2.32 per 1"		
Plaster board	3.73 per 3/8"		
Cork board	0.30 per 1"		
Wood Lath & Plaster	2.00 as applied		
Rigid Insulation (Board form)	0.33 per 1"		
Flexible Insulation	0.27 per 1"		
Cellular Gypsum (18*)	0.59 per 1"		
Flaked Gypsum (24*)	0.48 per 1"		
Brick	5.00 per 1"		

Number	Type of Sheathing	Insulation between Studding	Plaster Base						
			Wood Lath	Metal Lath	3/8" Plaster board	1/2" Rigid Insulation	1" Rigid Insulation	1 1/2" Cork board	2" Cork board
			A	B	C	D	E	F	G
1	1" Wood ^b	None	0.247	0.258	0.248	0.189	0.147	0.114	0.087
2		Flaked Gypsum Fill (24*) ^a	0.094	0.095	0.094	0.084	0.075	0.065	0.058
3		Cellular Gypsum Fill (18*) ^{a-c}	0.108	0.110	0.108	0.095	0.083	0.072	0.064
4		1/2" Flexible Insulation	0.147	0.150	0.147	0.125	0.105	0.087	0.076
5	1/2" Rigid Insulation (Board form)	None	0.209	0.217	0.210	0.166	0.133	0.106	0.090
6		Flaked Gypsum Fill (24*) ^a	0.087	0.089	0.087	0.079	0.071	0.062	0.056
7		Cellular Gypsum Fill (18*) ^{a-c}	0.100	0.102	0.101	0.089	0.079	0.068	0.061
8		1/2" Flexible Insulation	0.133	0.136	0.133	0.114	0.098	0.082	0.072
9	1/2" Plaster board	None	0.276	0.290	0.277	0.206	0.157	0.120	0.100
10		Flaked Gypsum Fill (24*) ^a	0.098	0.100	0.098	0.087	0.077	0.067	0.060
11		Cellular Gypsum Fill (18*) ^{a-c}	0.113	0.115	0.113	0.100	0.086	0.074	0.066
12		1/2" Flexible Insulation	0.157	0.161	0.157	0.131	0.109	0.090	0.079

^aThickness of fill assumed 3 3/4 in., based on 2 in. by 4 in. studding.

^bBased on 3/4 in., the actual thickness of 1 in. or 5/8 in. sheathing. Building paper neglected.

^cThe coefficient used for cellular gypsum, 0.59 is for 18 lb. weight—weights as low as 12 lb. may be used.

TABLE 25. COEFFICIENTS OF TRANSMISSION (*U*) OF INTERIOR WALLS AND PARTITIONS

Note.—These coefficients are expressed in Btu per hour per square foot per 1 deg Fahr difference in temperature between the air on the two sides and are based on still-air (no wind) conditions on both sides.

PLASTERED FRAME PARTITIONS						
The values of <i>U</i> in this Table are based on the following internal conductivities or conductances which are expressed in B.t.u. per Hr. per Sq. Ft. per 1° F		On one side of Studding only	On both sides of Studding	Insulation between Studding	Gypsum Fill between Studding	
Plaster (Gypsum) 2.32 per 1" Plaster board 3.73 per 3/8" Wood Lath & Plaster 2.00 as applied Rigid Insulation (Board form) 0.33 per 1" Flexible Insulation 0.27 per 1" Cork board 0.30 per 1" Cellular Gypsum (18*) 0.59 per 1" Flaked Gypsum, Dry (24*) 0.48 per 1"						
No.	Plaster Base	A	B	C	D	E
1	Metal Lath ^b	0.551	0.328	0.183	0.173	0.121
2	Wood Lath ^c	0.502	0.294	0.172	0.162	0.116
3	3/8" Plaster board ^c	0.506	0.297	0.172	0.163	0.117
4	1/2" Rigid Insulation (Board form) ^c	0.310	0.170	0.121	0.116	0.090
5	1" Rigid Insulation (Board form) ^c	0.211	0.113	0.088	0.086	0.071
6	1 1/2" Cork board	0.149	0.078	0.066	0.064	0.055
7	2" Cork board	0.119	0.062	0.054	0.053	0.047

PLASTERED MASONRY PARTITIONS			
The values of <i>U</i> in this Table are based on the following internal conductivities or conductance which are expressed in B.t.u. per Hr. per Sq. Ft. per 1° F		Plain Walls (No Plaster)	Walls Plastered one side
Hollow Clay Tile (4") 0.93 per 4" Brick 5.00 per 1" Hollow Gypsum Tile 0.46 per 4"			
No.	Wall Construction	A	B
1	4" Hollow Clay Tile	0.390	0.360
2	4" Brick	0.437	0.400
3	4" Hollow Gypsum Tile	0.273	0.258

Walls Plastered both sides		
No.	Wall Construction	C
1	4" Hollow Clay Tile	0.333
2	4" Brick	0.367
3	4" Hollow Gypsum Tile	0.244

^aThe thickness of the gypsum fill is approximately 3 3/4 in., the approximate 4 in. dimension of 2 in. by 4 in. studding.

^bMetal lath and plaster assumed 3/4 in. thick.

^cPlaster assumed 3/8 in. thick.

^dThe coefficient used for cellular gypsum, 0.59 is for 18 lb. weight—weights as low as 12 lb. may be used.