

TABLE 22. COEFFICIENTS OF TRANSMISSION (*U*) OF WOOD SHINGLE FRAME WALLS

Note.—THESE COEFFICIENTS ARE EXPRESSED IN B.T.U. 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 2"x4" Studs						
Wood (Yellow Pine or Fir)			Wood Shingles						
Plaster (Gypsum)			Plaster						
Plaster board			Plaster Base						
Cork board			Sheathing						
Wood Lath & Plaster									
Rigid Insulation (Board form)									
Flexible Insulation									
Cellular Gypsum (18*)									
Flaked Gypsum (24*)									
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 ^c	None	0.262	0.275	0.263	0.198	0.153	0.117	0.098
2		Flaked Gypsum Fill (24*) ^a	0.096	0.098	0.096	0.086	0.076	0.067	0.060
3		Cellular Gypsum Fill (18*) ^{a-d}	0.111	0.113	0.111	0.097	0.085	0.073	0.065
4		1/2" Flexible Insulation	0.152	0.157	0.153	0.128	0.107	0.089	0.077
5	1/2" Rigid Insulation (Board form) ^b	None	0.183	0.190	0.184	0.150	0.122	0.098	0.085
6		Flaked Gypsum Fill (24*) ^a	0.083	0.084	0.083	0.076	0.068	0.060	0.055
7		Cellular Gypsum Fill (18*) ^{a-d}	0.094	0.095	0.094	0.084	0.075	0.065	0.059
8		1/2" Flexible Insulation	0.122	0.125	0.122	0.106	0.091	0.077	0.069
9	1/2" Plaster-board ^b	None	0.233	0.243	0.234	0.181	0.142	0.111	0.094
10		Flaked Gypsum Fill (24*) ^a	0.091	0.093	0.092	0.083	0.074	0.065	0.059
11		Cellular Gypsum Fill (18*) ^{a-d}	0.105	0.107	0.105	0.093	0.081	0.070	0.063
12		1/2" Flexible Insulation	0.142	0.146	0.142	0.121	0.102	0.085	0.074

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

^bFurring strips between wood shingles and sheathing.

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

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

TABLE 23. COEFFICIENTS OF TRANSMISSION (*U*) OF STUCCO FRAME WALLS

Note.—THESE COEFFICIENTS ARE EXPRESSED IN B.T.U. 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)			Sheathing						
Plaster (Gypsum)			2"x4" Studs						
Plaster board			1" Stucco						
Cork board									
Wood Lath & Plaster									
Rigid Insulation (Board form)									
Flexible Insulation									
Cellular Gypsum (18*)									
Flaked Gypsum (24*)									
Brick									
Stucco									
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	0.302	0.319	0.304	0.220	0.165	0.125	0.103
2		Flaked Gypsum Fill (24*) ^a	0.101	0.102	0.101	0.089	0.079	0.068	0.061
3		Cellular Gypsum Fill (18*) ^{a-c}	0.117	0.120	0.117	0.103	0.089	0.075	0.067
4		1/2" Flexible Insulation	0.165	0.169	0.165	0.137	0.113	0.093	0.080
5	1/2" Rigid Insulation (Board form)	None	0.247	0.259	0.248	0.190	0.147	0.114	0.096
6		Flaked Gypsum Fill (24*) ^a	0.094	0.095	0.094	0.084	0.075	0.065	0.058
7		Cellular Gypsum Fill (18*) ^{a-c}	0.108	0.110	0.108	0.095	0.083	0.072	0.064
8		1/2" Flexible Insulation	0.147	0.151	0.147	0.125	0.105	0.087	0.076
9	1/2" Plaster-board ^b	None	0.347	0.369	0.349	0.243	0.178	0.131	0.108
10		Flaked Gypsum Fill (24*) ^a	0.105	0.107	0.105	0.093	0.081	0.070	0.063
11		Cellular Gypsum Fill (18*) ^{a-c}	0.123	0.126	0.124	0.107	0.092	0.078	0.069
12		1/2" Flexible Insulation	0.177	0.183	0.178	0.146	0.119	0.097	0.083

^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 3/4 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.