

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

Note.—THESE COEFFICIENTS ARE EXPRESSED IN BTU PER HOUR PER SQUARE FOOT PER 1 DEG FAH 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 U 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	$\frac{3}{8}$ " Plaster-board	$\frac{1}{2}$ " Rigid Insulation	1" Rigid Insulation	$\frac{1}{2}$ " 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		$\frac{1}{2}$ " Flexible Insulation	0.152	0.157	0.153	0.128	0.107	0.089	0.077
5	$\frac{1}{2}$ " 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		$\frac{1}{2}$ " Flexible Insulation	0.122	0.125	0.122	0.106	0.091	0.077	0.069
9	$\frac{1}{2}$ " 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		$\frac{1}{2}$ " Flexible Insulation	0.142	0.146	0.142	0.121	0.102	0.085	0.074

^aThickness of fill assumed $3\frac{3}{4}$ in., based on 2 in. by 4 in. studding.

^bFurring strips between wood shingles and sheathing.

^cBased on $\frac{3}{4}$ in., the actual thickness of 1 in. or $\frac{1}{2}$ 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 BTU PER HOUR PER SQUARE FOOT PER 1 DEG FAH 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 U 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			Plaster						
Wood Lath & Plaster			Plaster Base						
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	$\frac{3}{8}$ " Plaster-board	$\frac{1}{2}$ " Rigid Insulation	1" Rigid Insulation	$\frac{1}{2}$ " 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		$\frac{1}{2}$ " Flexible Insulation	0.165	0.169	0.165	0.137	0.113	0.093	0.080
5	$\frac{1}{2}$ " 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		$\frac{1}{2}$ " Flexible Insulation	0.147	0.151	0.147	0.125	0.105	0.087	0.076
9	$\frac{1}{2}$ " Plaster-board	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		$\frac{1}{2}$ " Flexible Insulation	0.177	0.183	0.178	0.146	0.119	0.097	0.083

^aThickness of fill assumed $3\frac{3}{4}$ in., based on 2 in. by 4 in. studding.

^bBased on $\frac{3}{4}$ in., the actual thickness of 1 in. or $\frac{1}{2}$ 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.