

TABLE 11-B. COEFFICIENTS OF TRANSMISSION (U) OF VARIOUS TYPES OF PITCHED ROOFS

Note.—The figures on this page are the combined coefficients of transmission of pitched roofs, unheated attics, and top floor ceilings, and are expressed in B.t.u. per hour per square foot of roof area per 1 deg. Fahr. difference in temperature between the air underneath the ceiling and the outside air. An average exposure of 15 miles has been assumed. These coefficients are based on $\frac{1}{4}$ pitched roofs, but are sufficiently accurate for roofs ranging from $\frac{1}{4}$ pitch to $\frac{3}{4}$ pitch.

UNHEATED			
The values of U in this Table are based on the following Internal Conductivities (C) which are expressed in B.t.u. per Hr. per Sq. Ft. per 1°F			
Asphalt or Composition Roofing	6.50	per 1"	
Asbestos Shingles	6.00	per 1"	
Slate Shingles	10.37	per 1"	
Wood (Yellow Pine or Fir)	1.00	per 1"	
Wood Lath & Plaster	2.00	as applied	
Plaster Board	3.04	per 1"	
Plaster (Gypsum)	2.32	per 1"	
Fiber Insulation (Board form)	0.33	per 1"	
Felt or Quilt Insulation (Soft)	0.27	per 1"	
Cork board	0.30	per 1"	
Cellular Gypsum	0.52	per 1"	
Powdered Gypsum	0.59	per 1"	

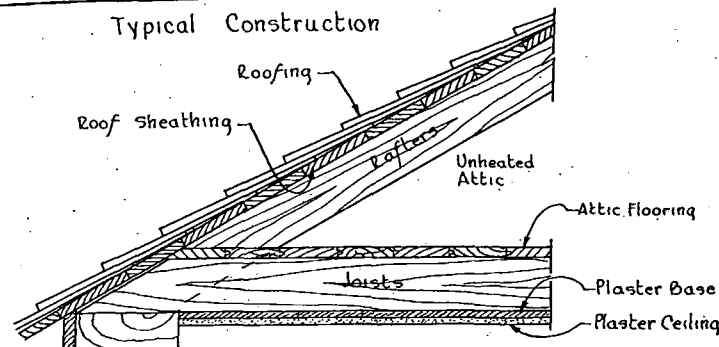
Roof Number	Type of Ceiling	Insulation on underside of Roof Rafters	Insulation between Ceiling Joists
251	Wood Lath & Plaster ($\frac{1}{2}$ ")	None	None
252	Wood Lath & Plaster ($\frac{1}{2}$ ")	None	1" Felt or Quilt Insulation (Soft) †
253	Wood Lath & Plaster ($\frac{1}{2}$ ")	$\frac{1}{2}$ " Fiber Insulation (Board form)	$\frac{1}{2}$ " Fiber Insulation † (Board form)
254	Wood Lath & Plaster ($\frac{1}{2}$ ")	None	$\frac{3}{8}$ " Cellular Gypsum Fill
255	Wood Lath & Plaster ($\frac{1}{2}$ ")	None	$\frac{3}{8}$ " Powdered Gypsum Fill
256	$\frac{3}{8}$ " Plaster Board & Plaster ($\frac{1}{2}$ ")	None	None
257	$\frac{1}{2}$ " Cork board & Plaster ($\frac{1}{2}$ ")	None	None
258	2" Cork board & Plaster ($\frac{1}{2}$ ")	None	None
259	$\frac{1}{2}$ " Fiber Insulation (Board form) & Plaster ($\frac{1}{2}$ ")	None	None
260	$\frac{1}{2}$ " Fiber Insulation (Board form) & Plaster ($\frac{1}{2}$ ")	$\frac{1}{2}$ " Fiber Insulation (Board form)	$\frac{1}{2}$ " Fiber Insulation (Board form)

*Based on 1 in. by 4 in., spaced 2 in.

†Can also be applied to underside of ceiling joists with furring strips between insulation and ceiling.

‡Based on actual thickness of 1 in. lumber of approximately $\frac{11}{16}$ in.

ATTICS



Type of Roofing and Roof Sheathing

Wood Shingles on Wood Strips *		Asphalt Shingles or Composition Roofing on Wood Sheathing		Rigid Asbestos Shingles on Wood Sheathing		Slate or Tile and Roofing Felt on Wood Sheathing	
No Attic Flooring	1x6" Y.P. † Attic Flooring	No Attic Flooring	1x6" Y.P. † Attic Flooring	No Attic Flooring	1x6" Y.P. † Attic Flooring	No Attic Flooring	1x6" Y.P. † Attic Flooring
a	b	c	d	e	f	g	h
0.224	0.139	0.231	0.141	0.230	0.141	0.237	0.143
0.118	0.089	0.120	0.090	0.120	0.090	0.121	0.091
0.090	0.074	0.091	0.073	0.091	0.073	0.089	0.074
0.085	0.078	0.086	0.079	0.086	0.079	0.086	0.080
0.078	0.073	0.079	0.074	0.079	0.074	0.080	0.074
0.235	0.143	0.243	0.146	0.242	0.146	0.249	0.148
0.099	0.078	0.100	0.079	0.100	0.079	0.101	0.079
0.082	0.067	0.083	0.068	0.083	0.068	0.084	0.068
0.168	0.115	0.172	0.117	0.172	0.117	0.176	0.118
0.080	0.066	0.080	0.066	0.080	0.066	0.081	0.067

*Based on 1 in. by 4 in., spaced 2 in.

†Can also be applied to underside of ceiling joists with furring strips between insulation and ceiling.

‡Based on actual thickness of 1 in. lumber of approximately $\frac{11}{16}$ in.