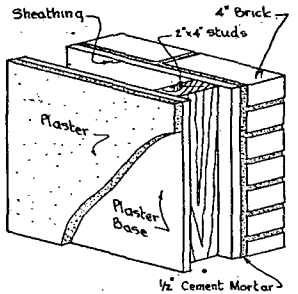


TABLE 7-D. COEFFICIENTS OF TRANSMISSION (*U*) OF VARIOUS TYPES OF FRAME WALL CONSTRUCTION

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.

BRICK VENEER WALLS				
The values of <i>U</i> in this Table are based on the following Internal Conductivities (<i>C</i>) which are expressed in B.t.u. per hr. per Sq.ft. per 1° F		Typical Construction		
				
		Brick	5.00 per 1° F	
		Cement Mortar	8.00 per 1° F	
		Plaster (Gypsum)	2.32 per 1° F	
		Wood Lath & Plaster	2.00 as applied	
		Plaster Board	3.04 per 1° F	
		Cork board	0.30 per 1° F	
		Fiber Insulation (Board form)	0.33 per 1° F	
		Felt or Quilt Insulation (Soft)	0.27 per 1° F	
		Cellular Gypsum (18*)	0.59 per 1° F	
		Powdered Gypsum (26*)	0.52 per 1° F	
Wall Number	Type of Sheathing	Insulation Between Studding	Plaster Base	Coefficient of Transmission <i>U</i>
144	Wood *	None	Wood Lath	0.216
145	Wood *	½" Felt or Quilt † Insulation	Wood Lath	0.125
146	Wood *	½" Fiber Insulation † (Board form)	Wood Lath	0.131
147	Wood *	Cellular Gypsum Fill **	Wood Lath	0.108
148	Wood *	Powdered Gypsum Fill **	Wood Lath	0.099
149	Wood *	None	1½" Cork board	0.107
150	Wood *	None	2" Cork board	0.091
151	½" Fiber Insulation (Board form)	None	½" Fiber Insulation (Board form)	0.152
152	1" Fiber Insulation (Board form)	None	½" Fiber Insulation (Board form)	0.123
153	½" Fiber Insulation (Board form)	½" Fiber Insulation † (Board form)	½" Fiber Insulation (Board form)	0.104
154	¾" Plaster Board	None	¾" Plaster Board	0.262

*Based on ¾ in., the actual thickness of 1 in. or ¾ in. sheathing.

†Building paper neglected in computations in accordance with accepted practice.

‡Can also be applied to inside of studding with plaster base separated by furring strips.

**Thickness of fill assumed 3½ in., based on 2 in. by 4 in. studding.

TABLE 8 A AND B. COEFFICIENTS OF TRANSMISSION (*U*) OF VARIOUS TYPES OF INTERIOR WALLS AND PARTITIONS

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 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 (<i>C</i>) 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	
		Studding	Studding	Insulation	Gypsum Fill	Gypsum Fill
		Plaster (Gypsum) 2.32 per 1° F	Plaster Board 3.04 per 1° F	Wood Lath & Plaster 2.00 as applied	Fiber Ins. (Board form) 0.33 per 1° F	Felt or Quilt Ins. (Soft) 0.27 per 1° F
		Cork board 0.30 per 1° F	Cellular Gypsum (18*) 0.59 per 1° F	Powdered Gypsum (26*) 0.52 per 1° F	½" Fiber Insulation (Board form) 0.33 per 1° F	½" Felt or Quilt Insulation (Soft) 0.27 per 1° F
					Cellular Gypsum Fill *	Powdered Gypsum Fill *
Wall No.	Plaster Base	a	b	c	d	e f
155	Metal Lath †	0.551	0.275	0.158	0.143	0.124 0.113
156	Wood Lath †	0.502	0.251	0.143	0.136	0.119 0.108
157	¾" Plaster Board †	0.546	0.273			
158	½" Fiber Insulation (Board form) †	0.311	0.155	0.106		
159	1" Fiber Insulation (Board form) †	0.211	0.106	0.080		
160	1½" Cork board †	0.149	0.074			
161	2" Cork board †	0.119	0.060			
B PLASTERED MASONRY PARTITIONS						
The values of <i>U</i> in this Table are based on the following Internal Conductivities (<i>C</i>) which are expressed in B.t.u. per hr. per Sq.ft. per 1° F		Plain Walls (No Plaster)	Walls Plastered One Side	Walls Plastered Both Sides		
			½" Gypsum Plaster	½" Gypsum Plaster		
		Hollow Clay Tile (4") 0.65 per 4"				
		Brick 5.00 per 1"				
		Hollow Gypsum Tile (4") 1.00 per 1"				
Wall No.	Wall Construction	a	b	c		
162	4" Hollow Clay Tile	0.33	0.31	0.29		
163	4" Brick	0.44	0.40	0.37		
164	4" Hollow Gypsum Tile	0.18	0.175	0.17		

*The thickness of the Gypsum Fill is approximately 3½ in., as this is the approximate 4 in. dimension of 2 in. by 4 in. studding.

†Metal lath and plaster assumed ¾ in. thick.

‡Plaster assumed ½ in. thick.