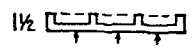
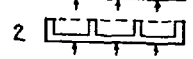
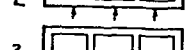
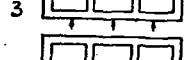
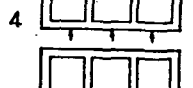
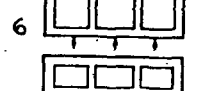
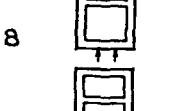
TABLE 11. CONDUCTIVITIES (k) AND CONDUCTANCES (C) OF BUILDING MATERIALS

Based on Tests Conducted by Various Authorities [p]

MATERIAL	DESCRIPTION	MEAN TEMP. (DEG. FAHR.)	CONDUCTIVITY (k) OR CONDUCTANCE (C)	AUTHORITY
Concrete	Stone 1-2-5 mix	95[c]	6.27	C. L. Norton, Boston, Mass.
Concrete	Cinder 1-2-4 mix	122	2.35	C. L. Norton, Boston, Mass.
Slate		201	10.37	Lees & Chorlton
Stone	Limestone or Sandstone	.....	10.0	Estimated[e]
1½ in. Split Furring Clay Tile			1.40[b]	Estimated[m]
2 in. Split Furring Clay Tile			1.25[b]	Estimated[m]
2 in. Furring Clay Tile			1.18[b]	Estimated[m]
3 in. Furring or Partition Clay Tile			1.00[b]	Estimated[m]
4 in. Partition Clay Tile			0.93[b]	Estimated[m]
6 in. Partition Clay Tile			0.86[b]	Estimated[m]
6 in. Load Bearing Clay Tile			0.54[b]	Estimated[m]
8 in Backup Clay Tile			0.50[b]	Estimated[m]
8 in. Backup Clay Tile			0.39[b]	Estimated[m]
8 in. Load Bearing Clay Tile			0.49[b]	Estimated[m]

[a] In addition to the conductivity values for the authorities listed, considerable work of importance pertaining to the heat transmission of various types of construction and materials has been done by the late Prof. John R. Allen and Prof. A. J. Wood of the Engineering Experiment Station of Pennsylvania State College.

[b] For thickness stated or used in construction, not per 1 in. thickness.

[c] Hot side of plate.

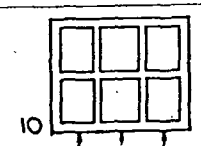
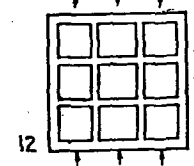
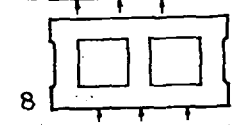
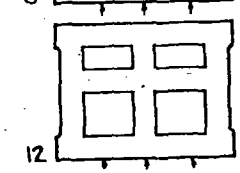
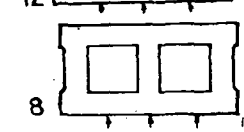
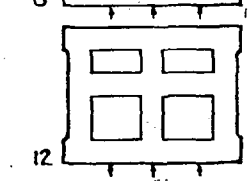
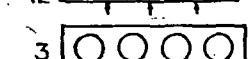
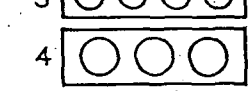
[e] Average of several values.

[m] Estimated from air space conductance data in Table 6, and Burned Clay conductivity of 5.0 per 1 in. Walls of load bearing tile assumed ¾ in. thick and webbs assumed ⅝ in. thick. Walls of all other tile assumed ⅝ in. thick and webbs ½ in. thick.

[p] See Chapter LX, by Chas. H. Herter of the Report of the Insulation Committee, *A. S. R. E.*, Annual Meeting 1922, Revised to 1924, entitled, Heat Transmission of Insulating Materials for a more comprehensive collection of heat transmission data relating to building and insulating materials.

TABLE 11. CONDUCTIVITIES (k) AND CONDUCTANCES (C) OF BUILDING MATERIALS

Based on Tests Conducted by Various Authorities [p]—(Continued)

MATERIAL	DESCRIPTION	MEAN TEMP. (DEG. FAHR.)	CONDUCTIVITY (k) OR CONDUCTANCE (C)	AUTHORITY
10 in. Load Bearing Clay Tile			0.46[b]	Estimated[m]
12 in. Load Bearing Clay Tile			0.33[b]	Estimated[m]
8 in. Concrete Blocks (hollow)			0.84[b]	Estimated[n]
12 in. Concrete Blocks (hollow)			0.52[b]	Estimated[n]
8 in. Cinder Blocks (hollow)			0.45[b]	Estimated[n]
12 in. Cinder Blocks (hollow)			0.28[b]	Estimated[n]
3 in. Gypsum Tile (hollow)			0.55[b]	Estimated[o]
4 in. Gypsum Tile (hollow)			0.46[b]	Estimated[q]
Ten Test	Rigid insulation made from wood fiber	52	0.33	E. A. Allcut University of Toronto

[m] Estimated from air space conductance data in Table 6, and Burned Clay conductivity of 5.0 per 1 in. Walls of load bearing tile assumed ¾ in. thick and webbs assumed ⅝ in. thick. Walls of all other tile assumed ⅝ in. thick and webbs ½ in. thick.

[n] Estimated from air space conductance data in Table 6, and conductivity of concrete of 8.30 per 1 in. Shells and webbs assumed 2 in. thick. Conductivity of dry Cinder Concrete assumed 3.33.

[o] Estimated from air space conductance data in Table 6, and conductivity of gypsum tile of 1.66 per 1 in. It is assumed that each tile has 4 cores per 12 in. width, each 1¾ in. in diameter.

[q] Estimated from air space conductance data in Table 6, and conductivity of gypsum tile of 1.66 per 1 in. It is assumed that each tile has 3 cores per 12 in. width, each 2⅓ in. in diameter.