UNIVERSAL GYPSUM & LIME CO.

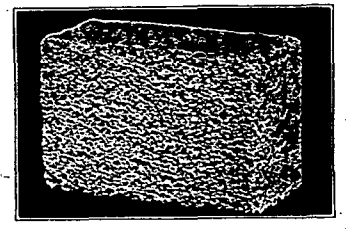
NEW YORK, N. Y., JACKSONVILLE, FLA. **Offices: Chicago, Ill.** FORT DODGE, IOWA, KANSAS CITY, MO.

MILLS—AKRON, N. Y., FORT DODGE, IOWA, ROTAN, TEXAS

INSULEX GYPSUM INSULATION

Reg. U. S. Patented Office

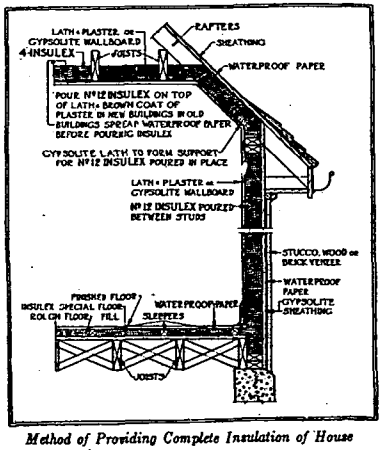
Insulex is a gypsum insulating material for building construction and is used to prevent the passage of heat, cold and sound. When mixed with water **Insulex** powder expands and hardens into a cellular mass in partitions, floor and ceiling spaces. It is especially adapted for use in homes, apartment houses, schools, commercial and industrial buildings where the saving of heat is a vital necessity.



A Block of INSULEX *Showing Cellular Structure*

The use of **Insulex** reduces the size of heating plants and amount of radiation installed so that in estimating the heating requirements of a building using **Insulex** insulation special conductivity factors are required.

Complete A. I. A. Specifications, reports of tests and engineering data on **Insulex** will be furnished on application. Our staff of heating engineers will help solve your problems on reduced radiation.



Method of Providing Complete Insulation of House

BUILDING CONSTRUCTION*

SIDE WALLS (FRAME)	UNINSULATED	INSULATED Filling Space between 2" x 4" Studs with 3½" No. 12 INSULEX	
		Lath and Plaster	Gypsolite Plaster Board and Plaster
Clapboard, Paper, Sheathing, Stud, Lath and Plaster	0.227	0.074	0.071
Brick Veneer, Paper, Sheathing, Stud, Lath and Plaster	0.216	0.072	0.069
Cement Stucco, Paper, Sheathing, Stud, Lath and Plaster	0.257	0.076	0.073

SIDE WALL (MASONRY)			By Using 2-Inch Furring Strips and Filling Space with No. 12 INSULEX	
	No Furring Strips	With Furring Strips	Lath and Plaster	Gypsolite Plaster Board and Plaster
Brickwall Wall—Plastered Inside:				
9-in.	0.332	0.209	0.113	0.107
13-in.	0.263	0.179	0.104	0.099
17-in.	0.208	0.152	0.094	0.089
Terra-Cotta Wall—Stucco Exterior—Plaster Inside:				
8-in.	0.273	0.184	0.105	0.100
12-in.	0.193	0.144	0.090	0.087

CEILING		Filling Space between Joists 4-in. with No. 12 INSULEX	
Ceiling Joists, Lath and Plaster. No Attic Floor	0.502	0.083	0.080
Ceiling Joists, Lath and Plaster. Attic Floor	0.234	0.070	0.068

ROOF RAFTER CONSTRUCTION	UNINSULATED	INSULATED Filling Space between Rafter 4 in. with No. 12 INSULEX	
Shingle, Wood on Wood Strips, Rafter, Lath and Plaster	0.246	0.071	0.068
Slate or Tile, Paper, Sheathing, Rafter, Lath and Plaster	0.262	0.072	0.070
Asphalt or Compo, Shingles, Paper, Sheathing, Rafter, Lath & Plaster	0.259	0.072	0.070
Asbestos Shingles, Paper, Sheathing, Rafter, Lath and Plaster	0.259	0.072	0.070

*HEATING CONSTANTS—For use in determining house heating, radistion requirements when insulated with **Insulex** according to Universal Gypsum & Lime Co. specifications.

The figures given are in B.t.u.'s per square foot per hour per degree temperature difference and show heat loss or conductivity. These figures can be used in figuring reduced size of heating plants and radiation required in an **Insulexed** home.

The uninsulated constants are based on those published in the A. S. H. & V. E. GUIDE, 1928. The insulated factors are based on internal conductivity of 0.40 for 12 lb. **Insulex No. 12.**

Builders Iron Foundry

9 Codding Street — **Providence, R. I.**

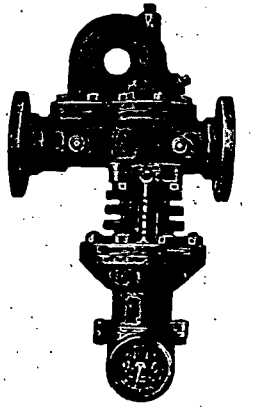
Branch Offices and Representatives

NEW YORK, N. Y.	25 Church Street	PITTSBURGH, PA.	1503 Oliver Building
PHILADELPHIA, PA.	617 Harrison Building	CHICAGO, ILL.	466 Peoples Gas Building
SAN FRANCISCO, CALIF.	Percy Keatinge, 85 Second Street		
LOS ANGELES, CALIF.	Percy Keatinge, c/o Pacific Mfg. Co., 530 West 6th Street		
DALLAS, TEXAS.	Morey & Morey, 417 Praetorian Building		
CHARLOTTE, N. C.	Grinnell Co., Inc., P. O. Box 336		
TORONTO, ONT., CAN.	Allen General Supplies, Ltd., 15 Toronto Street		
ATLANTA, GA.	Wm. F. Wilcox, Fourth National Bank Building		
SEATTLE, WASH.	California Filter Co., 1005 Securities Building		
KANSAS CITY, MO.	Terry, Cowan & Smith, Inc., 1005 Davidson Building		
VANCOUVER, B. C., CAN.	Chas. A. Moorehead, c/o R. C. Cooper & Co., Ltd., 615 Pender Street, West		
BUENOS AIRES, ARGENTINA, S. A.	Major Geo. C. Robertson, 760 Avenida de Mayo		

Builders of the Venturi Meter, Diaphragm Meter, Shunt Steam Meter, Etc.

SHUNT STEAM METER

The Shunt Steam Meter fills the need for a low priced, practical steam meter which is easily installed and accurate over a wide range. It is used to advantage in measuring steam sold or in checking the distribution of steam (also air or gas) to various buildings, departments, machines or processes. Illustration shows the complete Meter. An orifice in the main line of flow deflects a portion of the steam through nozzles and against the turbine located in the shunt circuit out of the main line of flow. The turbine shaft extends through a housing into a condensation chamber below the main line. A damping fan attached to this shaft operates under water, keeping the speed low and eliminating bearing trouble. Magnetic drive between this chamber and the counter mechanism protects the latter from moisture. The meter is installed as a unit in 2, 3 and 4-in. lines. For larger size mains a small meter is installed in a by-pass line around an orifice in the main line.



Shunt Steam Meter, Type K S.

	Steam Pressure Lbs. per Sq. In. Gauge	Approximate Measuring Range	Rated Capacity of Saturated Steam Lbs. per Hour		
			2" Meter	3" Meter	4" Meter
Low Pressure Meters	0	10-1	610	1410	2530
	5	10-1	810	1880	3350
	10	10-1	1000	2340	4170
	15	10-1	1200	2750	4750
	20	10-1	1380	2950	5150
	30	11-1	1650	3400	5850
	40	12-1	1800	3750	6450
	50	13-1	2000	4050	7000
Standard Meters	50	10-1	2650	6000	10600
	75	10-1	3650	8250	14600
	100	11-1	4150	9500	16600
	125	12-1	4600	10500	18300
	150	13-1	5000	11400	20000
	175	14-1	5350	12300	21400
	200	15-1	5700	13000	22700
Extra Heavy Meters	225	15-1	6000	13700	24000
	250	15-1	6300	14400	25200
	275	15-1	6600	15200	26500
	300	15-1	6900	15700	27500

Table shows rated capacities only. Minimum Capacities equal one-tenth tabulated quantities. Where Approximate Measuring Range exceeds 10-1 the Meter has that overload capacity.

Bulletin 234 gives complete information.