

Alfol Insulation Co.

Chrysler Building :: New York, N. Y.

Agents in Principal Cities

INSULATION for

Fans
Blowers
Pumps
Ducts
Houses, Buildings, etc.

Turbines
Dehumidifiers
Air Conditioners
Boilers, Pipes, etc.



INSULATION for

Refrigerators
Refrigerator Cars
Refrigerator Trucks
Refrigerator Boxes
Refrigerated Rooms etc.

Ships
Ovens
Ranges
Tanks
Still

At temperatures up to 1150° F. Patented in 34 Countries

DESCRIPTION

ALFOL Insulation is a flexible form of insulating material for use on irregular, curved or straight surfaces where it is desirable to conserve heat or cold, prevent condensation and block sound transmission. In its simplest form it consists of successive layers of crumpled special metal foil applied approximately $\frac{3}{8}$ " apart. The outside layer of ALFOL is covered with a removable metal jacket.



Alfol Insulation—layers spaced approximately $\frac{3}{8}$ " apart.
Conductivity—Panel Type .28
Crumpled Type .28



Alfol Metal-Jacketed Pipe Lines

ALFOL is a modern, scientifically designed insulation which effectively and economically meets all high and low temperature requirements. Some of the many advantages are:

1. **Negligible Weight**—only $\frac{1}{4}$ oz. per board foot.
2. **Highly Efficient**—conductivity .28 B.t.u. per hour, per sq. ft., per 1° F temp. difference, per inch thick.
3. **Non-Inflammable**—being metal it will not burn.
4. **Impervious to Moisture**—repels all moisture attacks thereby retaining its uniform high insulating value.
5. **Durable**—unaffected by vibration, will not disintegrate, crumble, warp or settle.

6. **Odorless and Clean**—ALFOL has no odor. No dust, dirt or waste result from its use.

7. **Low Heat Storage**—ALFOL possesses virtually no heat storage capacity—therefore pre-heating or pre-cooling may be done

much more rapidly than with any other insulation.

8. **Low Initial Cost**—ease, rapidity of application and no dirt or waste make the initial cost of ALFOL lower than for most other insulations.

APPLICATION

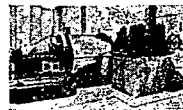
ALFOL Insulation is applied in never more than 3 crumpled layers to one inch thickness.

The high reflectivity of the foil (95%) and the non-conducting air spaces between the layers, provide ALFOL's amazing efficiency. It is never necessary to wad or pack ALFOL in place. As a matter of fact, when applied loosely in corners, slots, etc., its efficiency is actually increased. All ALFOL joints are lapped in each layer about 1" and staggered with respect to joints in adjacent layers. All stiffeners, studs, rivet heads, etc., protruding into the insulation are lightly covered over with the same number of layers used on surrounding surfaces.

Removable metal jackets with their many obvious advantages are applied over ALFOL Insulation.



Alfol Insulation for Heating and Ventilating Ducts



Alfol Insulation on 9000 KW. Turbine

SIZES

ALFOL is furnished in convenient size rolls of 2000 or 3000 sq. ft. Rolls are approx. 6" diam. x 15 $\frac{1}{4}$ " long.

ENGINEERING

Trained ALFOL engineers are ready to assist in the solution of your insulating problems.



Texas & Pacific R. R. Alfol Insulated Train

(See Chapter 5 for information on Aluminum Foil Insulation)

141 Milk Street

101 Park Avenue, NEW YORK
5000 Bloomingdale Avenue, CHICAGO

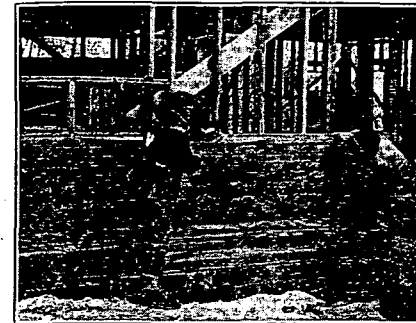
Samuel Cabot
Incorporated

Boston, Mass.

PHILADELPHIA, KANSAS CITY, MINNEAPOLIS, LOS ANGELES, SAN FRANCISCO, SEATTLE, PORTLAND

Agents in All Principal Cities

Cabot's Heat-, Cold-, and Sound-Insulating Quilt



Cabot's Quilt being applied to under side of roof and walls, for heat insulation

Thicknesses—Cabot's Quilt is made in Single-Ply (X), about $\frac{3}{10}$ " thick. Double-Ply (XX), about $\frac{5}{10}$ " thick. Triple-Ply (XXX), $\frac{8}{10}$ " thick; and Inch Quilt, 1 $\frac{1}{10}$ " thick.

U. S. Government Bureau of Standards Letter Circular No. 227, reporting tests of numerous Insulating Materials, gives Cabot's Quilt a Thermal Conductivity rating of 0.25 per inch, which was equalled by only two other insulators, regardless of cost.

Tests conducted by Prof. Gordon B. Wilkes, of the Massachusetts Institute of Technology, show the following savings in heat leakage in different methods of construction, by the use of Cabot's Quilt.

CONSTRUCTION WALL	CONDUCTIVITY		PERCENTAGE HEAT SAVING
	Uninsulated "H"	Insulated with Cabot's Quilt "H"	
Clapboard, studding.....	0.70	0.26	63
Clapboard, studding, lath, plaster.....	0.44	0.21	52
Clapboard, sheathing, studding, lath, plaster.....	0.28	0.16	43
8 in. brick.....	0.40	0.20	50
8 in. brick, furring, lath, plaster.....	0.27	0.16	41
4 in. tile, stucco, outside, plaster inside.....	0.40	0.20	50
12 in. concrete.....	0.46	0.21	54
Corrugated iron.....	1.50	0.32	79
12 in. stone.....	0.49	0.22	55
12 in. concrete, furring, lath, plaster.....	0.40	0.20	50
Stucco, studding, plaster.....	0.45	0.21	53
ROOF			
Tar, gravel on 4 in. concrete.....	0.60	0.24	60
Metal on tongue and groove sheathing.....	0.42	0.20	52
Corrugated iron on wood frame.....	1.80	0.32	82
Tile or slate on wood sheathing.....	0.82	0.27	67
Tar, gravel, tar paper, 2 in. wood plank.....	0.26	0.16	39
Shingles, sheathing, studding, lath, plaster.....	0.30	0.17	43
Wood shingles on shingle lath.....	0.64*	0.24	63

*Average value from Jones' tables, *The Heating and Ventilating Magazine*.

The cost of Cabot's Quilt is so low, for material and application, that the resulting smaller Heating Equipment required usually more than pays for entire insulation. Thereafter there is a yearly fuel saving.