

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 1250° F. Patented in 34 Countries

DESCRIPTION



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

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 $\frac{3}{8}$ in. apart. The outside layer of ALFOL is covered with a removable metal jacket.

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



Alfol Metal-Jacketed Pipe Lines



Burlington Zephyr, Alfol Insulated.

(See Chapter 5 for information on Aluminum Foil Insulation)

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 thick-

ness. 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 in. and staggered with respect to joints in adjacent layers.



Alfol Insulated Houses pre-heat quicker in winter, and cool down quicker in summer.

PERMANENCE

Many years of operating service in buildings, railroad cars, locomotives, ships, ovens, piping etc., have proved ALFOL's enduring efficiency.

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



Alfol Insulation on 9000 KW. Turbine

SIZES

ALFOL is furnished in convenient size rolls of 2000 or 3000 sq. ft. Rolls are approx. 6 in. diam. x 15 $\frac{3}{4}$ in. long.

ENGINEERING

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

AMERICAN FLANGE & MANUFACTURING Co. Inc.

26 BROADWAY
NEW YORK

Ferro-Therm Something New in Insulation

Ferro-Therm metal insulation is a new invention utilizing commercial black steel sheets properly spaced to eliminate turbulent air flow and to provide high thermal insulating efficiency.

In **Ferro-Therm** insulation parallel black sheets of 38 gage having low emission and high reflection values at the frequencies of radiant heat are used. They are formed with angular surfaces with small ribs at the joint to secure rigidity, eliminate vibration and prevent transmission of sound.

Ferro-Therm metal insulation is made 16 by 40 in., 22 by 40 in. and 32 by 40 in. for convenient and economical installation.



Typical Ferro-Therm Installation

The number of sheets of **Ferro-Therm** used in an insulated wall may be one or more and the spacing may be $\frac{3}{8}$ in., $\frac{1}{2}$ in., $\frac{5}{8}$ in., $\frac{3}{4}$ in. and $\frac{7}{8}$ in., depending on temperature differences.

Applications—General building insulation, cold storage plants, railway refrigerator cars, refrigerators, ovens, dry kilns, boiler and pipe covering.

In building applications for walls or roofs the use of one or more sheets is advisable and the accompanying illustration shows the method of application.

The heat conductivity factor of **Ferro-Therm** is 0.226 Btu's per hour per square foot per deg. F per inch of thickness determined in tests made by J. C. Peebles, Mechanical Engineer, Armour Institute of Technology, Chicago, Illinois, on a 2 in. thick panel of four sheets with $\frac{3}{8}$ in. spaces at a mean temperature of 72.1 F.

Ferro-Therm may also be successfully applied for insulating pipes carrying steam, water or refrigerant.

Ferro-Therm has the following unique advantages; (1) No absorption of moisture or adsorption of gases, (2) No condensation of moisture in normal operation, (3) Proof against attack by bacteria and rodents, (4) Free from odors—non-inflammable, (5) Light in weight—compact—strong—durable, (6) Low heat storage value, hence quick stabilization of temperature, (7) High in insulating efficiency.

More complete data on **Ferro-Therm** will be gladly supplied. The services of trained insulating specialists are available if you will write the American Flange and Manufacturing Co., Inc. **Ferro-Therm** is sold exclusively by this company. Engineers, Architects and Contractors are invited to write for prices.