Ehret Magnesia Manufacturing Co.

Valley Forge, Pa.

HEAT AND COLD INSULATIONS

HEATING—Ehret's 85% Magnesia, Air Cell Coverings, No. 18 Insulating Cement.

AIR CONDITIONING — Nicolfelt thermal and sound insulation, Ehret's Hair Felts, Cork Products.

PLUMBING—Ehret's Wool Felt Pipe Covering, Anti-Sweat Pipe Covering, Frost-Proof Pipe Covering.

ACOUSTICAL—Ehret's sound absorption and isolation felts.

85% MAGNESIA

Ehret's 85% Magnesia, in pipe covering, block and plastic forms, has become, during the past 40 years, renowned in every industry where insulating problems arise. It is pre-eminently suited for all temperature conditions up to 600°F.

Made from basic, hydrated, magnesium carbonate, the material which engineers agree is unsurpassed for heat insulating purposes due to its myriads of dead entrapped air cells.

Magnesia is manufactured from dolomite rock, mixed with asbestos fibre binder and moulded with a controlled pressure to insure proper strength without destroying the minute air cells. 85% Magnesia covering can be salvaged, if necessary, and ground up into cement. It is light weight and although it can absorb many times its own weight in water, it will dry out in service without impairing its efficiency. For outdoor use 85% Magnesia is furnished with an asphalt saturated asbestos felt jacket.

Substitutions for 85% Magnesia insulations are very expensive.

Its high thermal efficiency and long life free from shrinkage and deterioration make 85% Magnesia the most economical.

No. 18 INSULATING CEMENT

A plastic having great adhesive property, it sticks firmly to any surface. No wire or mesh supports being necessary, the application is easy and economical.

Recommended for monolithic insulation.

Highly efficient.

Low in cost due to its large covering capacity.

Is effective up to 1800°F.

HAIR FELT

Ehret's Standard Hair Felt, manufactured by the Platen Process, is composed of 100% pure cattle hair. Most efficient on temperatures from 100°F above to 60°F below zero. Its efficiency, particularly at sub zero temperatures, is due to the close felting of the hair, excluding moisture-laden air which might greatly harm other types from resultant condensation.

Ideally suited for insulating tanks, refrigerator cars, steel passenger and tank cars. Usually applied in layers, each of which is thoroughly air sealed.

For brine and ammonia work, we recommend a special "built-up" type of Hair Felt, fully described in our catalog "A-26." Punched Felts are also furnished for special conditions.

ENDURO HIGH TEMPERATURE INSULATION

For those having problems with insulation at temperatures from 600°F to 2000°F, Enduro will prove of special interest. Information on request.

Recommended Insulation Thickness for Flat Surfaces

	Temperature of Hot Surface				
	Under 300	300 to 450	450 to 600	600 to 700	700 to 800
Enduro	...	...	...	1½	2
85% Magnesia	1½	2½	3	2	2
Total	1½	2½	3	3½	4

(Plus a ½ in. Cement Finish.)

Thermal Conductivities in Btu's

Mean Temp.	85% Magnesia	Enduro	No. 18 Cement
100	0.420	0.465	0.520
200	0.460	0.500	0.560
300	0.510	0.550	0.610
500	0.590	0.620	0.700
800	....	0.730	0.840
1000	....	0.840	0.930

HEAT SEAL HOME INSULATION

Loose Wool—Granulated Wool—Wool Bats

International Fibre Board Limited

Sales Offices
OTTAWA—MONTREAL—TORONTO—WINNIPEG
Administrative Offices and Mills: GATINEAU, QUE.

London Office
THE TENTEST FIBRE BOARD CO. LTD.
ASTOR HOUSE, ALDWYCH, LONDON, W. C. 2., ENGLAND

TEN/TEST
INSULATING WALL BOARD

TEN/TEST is a manufactured lumber made from spruce fibres, solidly pressed under hydraulic pressure into a strong, homogeneous board. The fibres are chemically treated and water-proofed during process of manufacture, until the insulation is non-hygroscopic, free from capillary attraction and moisture-resisting in service commensurate with the maximum degree of insulation obtainable.

Official Tests

Conductivity. TEN/TEST has a conductivity of 0.33 B.T.U. per hour per square foot per degree fahr. per 1 in. thick. Authority: Professor E. A. Allcut, M. Sc. M. I. Mech. E. Mem. A.S.M.E. Professor of Applied Mechanics, University of Toronto. Tests performed by Hot-Plate method. Mean temperature 47.8 deg.

Tensile Strength 228 lb. per sq. in. Tests made on 7/16 in. board cut to strips 1 in. wide and tested in a Riehle Tensile Testing Machine, the grips being 2 in. apart. 228 lb. is the mean average of seven series of tests.

Transverse Strength (equal deflection) is 28.4 lb. Test made on 7/16 in. board, 6 in. wide, 18 in. long, on 12 in. centers, and load being applied to breaking point.

Plaster Bonding Strength 2163 lb. per sq. ft. Brown and scratch plaster coats were applied to standard 7/16 in. board, and the pull registered in an Olsen Testing Machine. Authority: Columbia University Testing Laboratories, New York.

Moisture Resisting. TEN/TEST, after complete immersion in water for 24 hours, registered 37.5% increase in weight.

NOTE.—Authority for tensile strength, transverse and moisture tests; J. T. Donald & Co., Ltd., Chemical Analysts and Engineers, Montreal, Que.

TEN/TEST Products

TEN/TEST Insulating Building Board. Standard insulation for use as exterior sheathing, interior finish; between walls and under floors for sound deadening. Standard Industrial Insulation for refrigeration and the prevention of condensation. Manufactured in convenient sizes: 4 ft. wide and up to 17 ft. long, ½ in. to 2 in. thick.

TEN/TEST Notch Board Plaster Base. Insulating plaster base having tongue and groove interlocking joints. Provides an effective bond with plaster without use of metal lath at joints. Sizes: 16 in. wide; 32 in. and 47¾ in. long. Thicknesses from ½ in. to 2 in.

TEN/TEST Roof Board. An effective roof insulation. Manufactured in two sizes: 1 x 4 ft. and 2 x 4 ft. Thicknesses from ½ in. to 2 in.

TEN/TEST Ashlar Block (Acousti "A"). For interior decoration and acoustical correction. Absorbs 35 per cent of incident sound at a frequency of 512. Can be supplied in a variety of designs and sizes to harmonize with any decorative treatment, allowing the architect much freedom in design and finish of churches, auditoriums, theatres, etc. Ashlar Blocks have bevelled edges, standard or to suit, can be left in the natural color or tinted as desired.

TEN/TEST Mouldings. An effective trim and finish for joints, corners, etc. Available in widths of ¾ in. to 10 in. and lengths up to 12 ft.

TEN/TEST Moulding Edge Wall Panels. Conceals joints and provides excellent decorative treatment. Featured in widths 11 in. to 47⅜ in., lengths up to 12 ft.

HYDRO/TEST. Water proof, insulating building board, designed particularly for low temperature requirements.