Norristown Magnesia and Asbestos Co.

Norristown, Pa.

ASBESTOS PRODUCTS

Trade Mark

FACTORIES:
Norristown, Pa.
Doylestown, Pa.
Pleasant Mills, N. J.

HEAT INSULATING MATERIAL

Superheated steam and high pressure saturated steam service:

2-Point—Efficient, durable and adaptable insulation.

Indent—Designed for severe conditions.

Ideal—Combines efficiency and strength.

Asbestos Magnesia—Economical moulded type.

Low pressure steam and hot water.

Air Cell and Norriscel—Standard for low temperature insulations, inexpensive. Norriscel has smaller cells and is the more efficient.

Wool Felt—Not fireproof, but very efficient.

Asbestos Boiler Cement:

"S"—A good, reliable, inexpensive cement.

"101"—Strong and efficient.

"505"—Easy to apply, great holding and covering power.

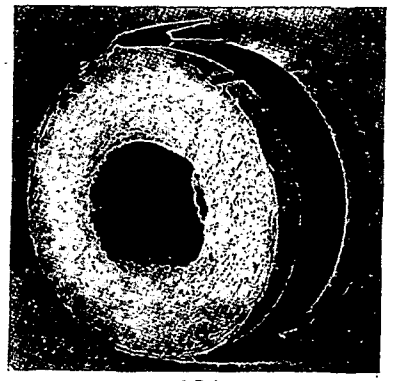
COLD INSULATING MATERIALS

Exposed Pipe Lines—Wool Felt with waterproof liner: inexpensive, yet very efficient.

Cold Lines Running Through Heated or Damp Rooms—Sweat Proof covering: wool felt protected from water and moisture, made to prevent air filtration through covering.

Outdoor Lines Exposed to Severest Weather—Frost Proof covering, a combination of hair and wool felt. Brine and ammonia lines: combination Diamond N, a built-up covering of hair and wool felt, waterproofed.

Other Products—Furnace cement, braking materials, lining for floors, partitions, ovens and doors, general heat and fire and acid fume protection, etc. Gaskets and packing. Asbestos millboard.



2-Point

2-Point is a heat insulating material made of felted asbestos and loosely packed diatomaceous earth so fashioned that a very large quantity of air is imprisoned in small cells. It is one of the newer developments in insulation and is particularly useful where extreme conditions of temperature and hard usage must be met. Its efficiency in preventing the escape of heat has been accurately determined and the results obtained are available to those who wish complete details.

Norriscel is adaptable to widely differing conditions of service. It is made of successive layers of plain and corrugated felted asbestos, the corrugations having a depth of slightly less than ⅛ in., bound firmly together. The arching effect produces great strength, yet retains lightness, so that it is quickly and easily applied or removed. Its asbestos composition makes it durable so that it is a most economical covering for medium and low temperature installations, while it is frequently used for higher temperatures where low initial expense is desirable. In block form for ovens, kilns, boilers and other large surfaces, it is made in sizes as desired for greatest ease of application.

Frictionite is an excellent and economical braking material for both ordinary and very severe conditions. It is composed of pure asbestos felted into a firm body, impregnated with a binding material which, under subsequent heat treatment, becomes strong and tough, holding the asbestos with great strength. In use, it is not affected by the heat generated by friction and will not cause fire. It does not "peel" or "ball up" even under high normal pressures: Oily surfaces have little effect upon it and the coefficient of friction is high.

Telephone Main 4995

Established 1910

The Ric-Wil Company

UNDERGROUND CONDUIT SYSTEMS FOR HEATING PIPES

Union Trust Building **CLEVELAND, OHIO**

AGENTS IN PRINCIPAL CITIES—REFER TO LOCAL TELEPHONE DIRECTORY

Products—RIC-WIL Interlocking Conduit, Interlocking Base Drain, Pipe Supports and RIC-WIL Underground Pipe Covering used in the "RIC-WIL Method" of Insulating Underground Steam, Hot Water and Fuel Oil Pipes.

Ric-wil Interlocking Conduit—RIC-WIL Conduit is first quality, standard weight, vitrified salt glazed tile of the bell and spigot type, and made of "Akron" shale. It is shipped on the job in full round sections and split into top and bottom halves as used. When installed bell and side joints are sealed with Portland cement. The top half has an overhanding lip that interlocks with the bottom half, providing extra cementing surface and protecting the side joints of tile against water. Top and bottom halves are numbered in pairs so that companion pieces may be kept together. Sections all in 2-ft. lengths, sizes from 4 to 24 in. inside diameter. Every sixth section of conduit has an opening in the bottom half through which a pipe support of the roller type projects to carry the steam, hot water or oil pipes thus making the pipe supports independent of the conduit itself—a desirable feature for this class of work.

Ric-wil Interlocking Base Drain—RIC-WIL Base Drain is first quality vitrified salt glazed tile of such design that it is both a base for supporting and lining up the conduit, and drain for carrying away any water which might otherwise accumulate around the conduit. The base drain also provides two points of support for conduit, adding 35 per cent to the ground load which the conduit will carry safely as compared to the same conduit placed on flat ground or broken stone. The top of the base drain has a slot in it into which the bell of conduit fits thus making sections of conduit and base drain stagger with each other so that a strong interlocking construction results. No concrete foundation is necessary in solid ground. Free drainage area of the base drain is large and ample for every practical condition. Three sizes are made: No. 1 for 4 and 6 in. conduits, No. 2 for 8 to 15 in. inclusive, and No. 3 for larger sizes. We will furnish ordinary drain tile instead of base drain if desired but the base drain will save more than its extra cost in labor.

Ric-wil Pipe Supports—The pipe supports are planned to carry from one to five or more pipes and are ordinarily spaced 12 ft. apart. They are strong, made of cast iron, rust proofed, and interlocked with the base drain, imposing no load on the conduit itself. Once in place, no movement of the pipes can disturb them.

Four Types of Ric-wil Conduit—RIC-WIL Conduit for pipes underground is of four types to meet varying service requirements.

Type DA—for hot water, fuel oil, and condensation returns. Tile and insulation in one, the latter moulded inside the tile and keyed in. Consists of a diatomaceous earth (Sil-O-Cel) mixture, light in weight and of high insulating quality; will not deteriorate. This type insulates the pipes from surrounding ground but not from each other, making it specially adapted to house oil and steam pipes together for fuel oil transmission. Exceptionally easy to install.

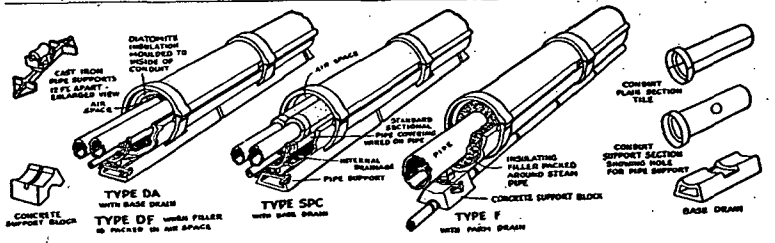
Type DF—for steam heating and power pipes. This is type *DA* with the addition of RIC-WIL Conduit Filler to be packed around the pipes at approximately 15 lb. per cu. ft. The filler is a good non-conductor which will not corrode the pipes nor shrink.

Type SPC—for steam heating and power pipes and for superheated steam. The tile itself is not lined with insulation as in types *DA* and *DF* but the insulation is applied to pipes direct and consists of any standard make of sectional pipe covering, the kind and thickness depending upon the service to be rendered. Double drainage is provided in this type.

Type F—for steam heating and power pipes. A lower priced type than the others, consisting of unlined tile with conduit filler packed around the pipes. Filler is the same as described in Type *DF* System.

Inquiries—Inquiries should state the size of pipe or pipes to be covered and the services to be carried by them—whether steam, condensation return, hot water or fuel oil. If steam, give pressure. Catalog and Price List on request.

Engineering—An engineering service is maintained for the convenience of customers.

Maximum Capacity of Conduits With Standard Equipment—Approximate

In. Diameter	4	6	8	10	12	15	18	20	22	24
1 Pipe	1½	3	4½	6	8	10	12	14	16	18
2 Pipes	½-½	¾-¾	1¼-1¼	2-2	3-3	4-4	5-5	6-6	7-7	8-8
3 Pipes	None	None	1¼-1¼-1	2-2-1¼	3-3-1½	4-4-2	5-5-2½	6-6-3	7-7-3½	8-8-4