

The Ric-wil Company

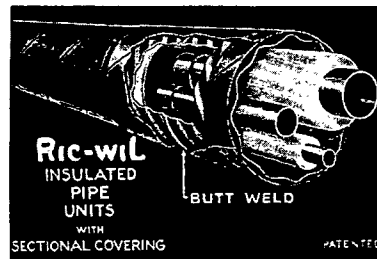
Agents in
Principal Cities

RIC-WIL

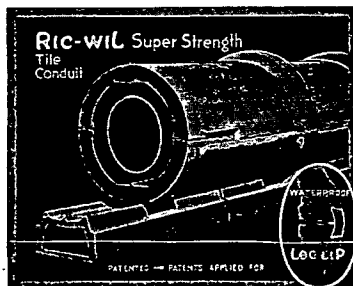
ESTABLISHED IN
1910

CONDUIT SYSTEMS FOR UNDERGROUND STEAM PIPES
Union Commerce Bldg., Cleveland, Ohio

Ric-wil Insulated Pipe Units—Pre-fabricated, pre-sealed, ready-to-install units, ideal for speed and economy. Armco Ingot Iron Conduit is coated with special asphalt $\frac{1}{8}$ in. thick over corrugations—a permanent housing for the insulated pipe which is surrounded with a protective airspace. Ample structural strength, lightweight and watertight. Furnished in any lengths, for single or multiple pipes, with any kind of steam pipe or insulation, for underground or overhead steam lines. Connections between units may be welded, as shown, or made with split conduit couplings. Write for latest Unit Bulletin.



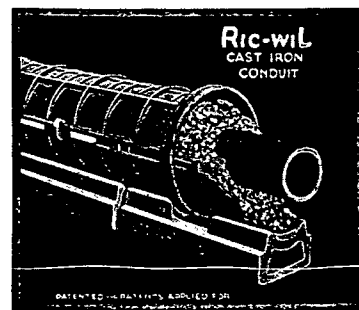
Types of Sectional Conduit—Ric-wil Super Tile Conduit, shown below, with Dry-paC Insulation, is an extra weight, heavy duty system designed for use under highway traffic or in especially wide or deep trenches. Vitrified tile, split on the job, with Loc-liP Side Joints, interlocking construction throughout. Same design also furnished in standard weight tile (Type F). Tile is bell and spigot design, lined or unlined, and comes in 24 in. sections, 4 in. to 27 in. inside diameter. For extra heavy duty under railways, Ric-wil is made of cast iron in 2 or 4 foot sections. Where continuous concrete base, poured on job, is desired, and reduced labor cost not essential, Ric-wil Universal Type System is recommended. Each system supplied complete with proper pipe supports, accessories, and insulation as specified. Separate bulletin on any one of these Ric-wil types supplied on request.



Base Drain—Standard Base Drain is vitrified salt glazed tile for tile conduit and extra heavy tile or cast iron for the cast iron conduit, in 24 in. lengths. Made in three sizes to support and drain properly all conduit sizes.

Insulation—Ric-wil Dry-paC Waterproof Insulation is high-grade asbestos, specially processed. Any grade of commercial hand packed insulation can be furnished, also sectional pipe covering. For lined conduit, diatomaceous earth mixture is molded and keyed inside the tile.

Engineering Service—Full cooperation with architects and engineers. Installation supervision if desired. Write for Catalog Bulletin with valuable underground data.



Universal Zonolite Insulation Co.

135 South LaSalle Street, Chicago, Illinois



SYSTEM FOR INSULATING UNDERGROUND PIPES

DESCRIPTION OF ZONOLITE SYSTEM

The Zonolite System is the modern, superior method of insulating underground pipes with Zonolite Concrete. The operations involved are as follows:

1. A structural concrete base or pad is placed in the bottom of a properly graded trench to support the pipes.
2. The base is waterproofed on top.
3. Precast Zonolite Concrete blocks are placed on the waterproofed base at intervals and the pipes are placed on them.
4. When the pipes are placed, they are wrapped with corrugated cardboard to provide a cushion for pipe expansion.
5. Reinforcing mesh is placed around the pipes, and forms are set to provide a minimum thickness of 6 inches of concrete around and over the pipes.
6. Zonolite Concrete is poured monolithically around the pipes in a continuous mass between loops or manholes.
7. When the Zonolite Concrete has set, the forms are removed and the exposed sections of concrete are waterproofed. After this, back-filling may begin.

DESCRIPTION OF ZONOLITE CONCRETE

Zonolite Insulating Concrete is formed by mixing Zonolite Concrete Aggregate with Portland cement, Zonolite Waterproofing Admix and water.

Zonolite Concrete Aggregate is made by exploding an unusual mica ore which forms a featherweight, all-mineral, inert, rotproof, fireproof, granular material with high insulating properties.

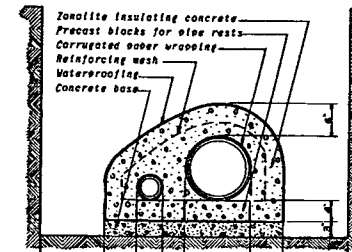
Zonolite Waterproofing Admix is a specially prepared liquid waterproofing medium which is added to Zonolite Concrete during mixing.

ADVANTAGES OF ZONOLITE SYSTEM

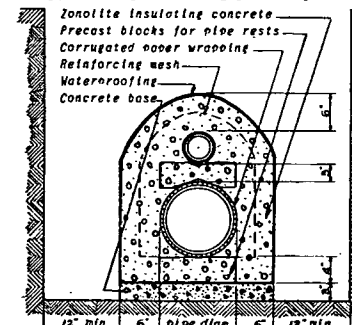
1. It increases efficiency by creating a continuous, unbroken covering of insulation around the pipes.
2. It forms a solid covering of water-repellent insulation eliminating joints or hollow spaces which could fill with water should the waterproofing leak.
3. It provides a permanent type insulation not subject to disintegration upon wetting, fireproof, chemically inert and rotproof.
4. It minimizes danger of damage to insulation or waterproofing due to handling.
5. It simplifies the installing and insulating of underground pipe lines.

ENGINEERING SERVICE AND SPECIFICATIONS

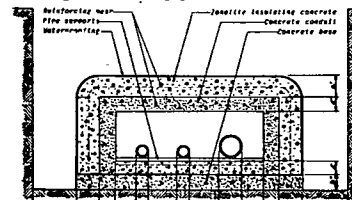
For engineering service and specifications write to the Universal Zonolite Insulation Co., 135 S. LaSalle Street, Chicago, Illinois.



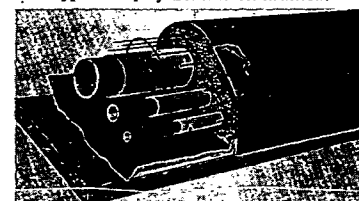
Typical straight run with pipes side by side.



Straight run with pipes one above the other.



Typical loop of Zonolite construction.



Perspective of Complete System.