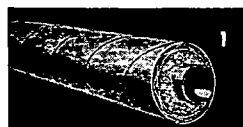


## The Ric-wil Company

### INSULATED PIPE CONDUIT SYSTEMS

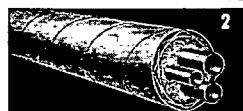
Union Commerce Bldg., Cleveland, Ohio • Agents in Principal Cities

There is a Ric-wil insulated conduit system engineered to your specific needs—the transmission of steam, hot water, oil, hot or refrigerated process liquids—providing heat transfer with the lowest possible loss.



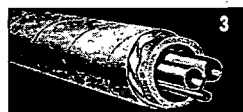
#### 1. RIC-WIL INSULATED PIPE UNIT—SINGLE PIPE SYSTEM

Prefabricated complete units—pipe as specified, thoroughly insulated, in helical corrugated conduit, coated and wrapped with asphalt saturated asbestos felt. 21-ft lengths for speedy installation. For underground or overhead systems.



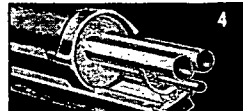
#### 2. RIC-WIL INSULATED PIPE UNIT—MULTIPLE PIPE SYSTEM

Any specified combination of pipes in prefabricated conduit—insulated and protected the same as the single pipe system. Any or all of the pipe lines may be specially insulated to meet job requirements.



#### 3. RIC-WIL INSULATED PIPE UNIT—FOR PROCESS LIQUIDS

An adaptation of the multiple system used where a steam or hot water line heats fluids in other lines. Pipes are insulated from the exterior but not from each other. Sizes and specifications as required—conduit same as for other insulated pipe units.



#### 4. RIC-WIL STANDARD TILE CONDUIT—TYPE F

Vitrified glazed A.S.T.M. Standard Tile Housing—acid and waterproof—with foundation type base drain supporting weight of piping through correctly engineered pipe supports. Positive locked-in-place cement seals on sides and ends. For single or multiple pipes.



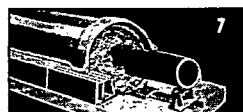
#### 5. RIC-WIL SUPER TILE CONDUIT—TYPE F

Same advantages as Standard Tile but with walls approximately double thick for strength under heavy traffic or where overhead load is above normal. Will support concentrated static load of 6 tons per wheel under actual installation conditions. Base drain of extra-heavy tile.



#### 6. RIC-WIL CAST IRON CONDUIT—TYPE F

Heavy reinforced cast iron conduit for use where underground pipe lines run close to or under railroad tracks. Durable, water-tight and vibration-proof. Positive locked-in-place cement seals on sides and ends with metal clamps for extra tightness.



#### 7. RIC-WIL TILE CONDUIT—UNIVERSAL TYPE

Where installation conditions dictate the use of a concrete pad Ric-wil Universal Tile is recommended. Side walls are double-cell vitrified trapezoidal block design. Arch may be Standard Tile, Super-Tile, or Cast Iron.



#### 8. RIC-WIL TILE CONDUIT—TYPE DA

For oil or process liquids where conduit must be insulated but individual lines are not insulated from one another. Insulation is a diatomaceous earth lining, moulded and keyed to inside of tile. May also be used (Type DF) with fibre insulation for steam heat, power and superheated steam. Applicable to Standard, Super-Tile and Cast Iron.

Ric-wil accessories are available in all type systems; standard and special fittings, factory fabricated or field fabricated expansion devices, alignment guides, and anchors. Descriptive bulletins on request.

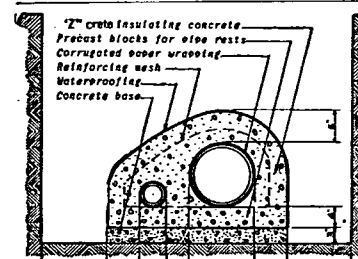
GET THE ORIGINAL—SPECIFY RIC-WIL

## Universal Zonolite Insulation Co.

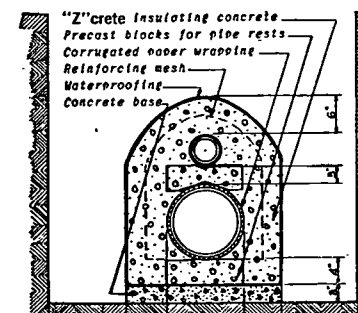
135 South LaSalle Street, Chicago, Illinois



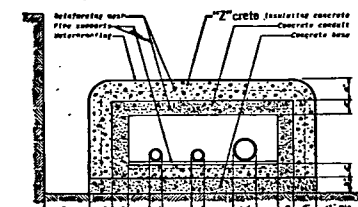
### SYSTEM FOR INSULATING UNDERGROUND PIPES



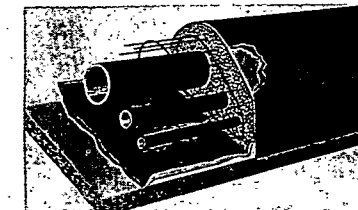
Typical straight run with pipes side by side.



Straight run with pipes one above the other.



Typical loop of "Z'crete" construction.



Perspective of Complete System.

#### DESCRIPTION OF "Z'crete" SYSTEM

The "Z'crete" System is the modern, superior method of insulating underground pipes with "Z'crete" Insulating 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 "Z'crete" 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 paper 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 "Z'crete" around and over the pipes.
6. "Z'crete" is poured monolithically around the pipes in a continuous mass between loops or manholes.
7. When the "Z'crete" has set, the forms are removed and the exposed sections of concrete are waterproofed. After this, back-filling may begin.

#### DESCRIPTION OF "Z'crete" INSULATING CONCRETE

"Z'crete" Insulating Concrete is formed by mixing "Z'crete" Aggregate with Portland cement, "Z'crete" Waterproofing Admix and water.

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

"Z'crete" Waterproofing Admix is a specially prepared liquid waterproofing medium which is added to "Z'crete" during mixing.

#### ADVANTAGES OF "Z'crete" 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, which is 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.