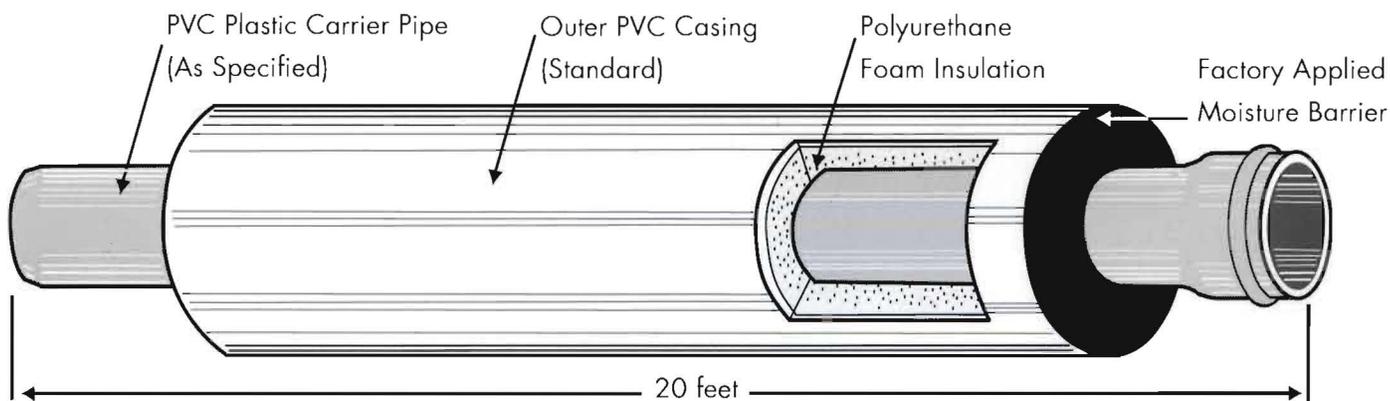


Preinsulated piping systems for above and below ground use on systems involving low temperatures.

Typical Uses:

- Chilled Water
- Condenser Water
- Brine
- Sewage
- Process Piping



The INSUL-TEK® PVC system is a totally factory fabricated, insulated and jacketed piping system supplied in 20 FT. lengths. Virtually all types and grades of PVC carrier pipe can be utilized within our INSUL-TEK® PVC system including Gasketed Bell and Spigot joint as well as solvent weld type joint. The use of the gasketed bell joint PVC carrier pipe offers the distinct advantage of accommodating for expansion and contraction within a piping system therefore eliminating the need for costly expansion devices.

The low initial cost of this system coupled with relative ease of installation and resultant low installation costs make it the ideal choice for many low temperature applications.

The standard casings for below ground use are PVC and HDPE. The spiral lockseam galvanized steel and aluminum casings are normally utilized on above ground systems. However, optional casings are available. Please consult the Casing Selection Guide for additional information.

Pipe Size	Casing Size	Unit Overall Length	Class 160 Weight/unit
1-1/2"	4"	20 Ft.	40 Lbs.
2"	4"	20 Ft.	40 Lbs.
2"	6"	20 Ft.	40 Lbs.
2-1/2"	4"	20 Ft.	40 Lbs.
2-1/2"	6"	20 Ft.	45 Lbs.
3"	6"	20 Ft.	60 Lbs.
4"	6"	20 Ft.	63 Lbs.
4"	8"	20 Ft.	83 Lbs.
6"	8"	20 Ft.	130 Lbs.
6"	10"	20 Ft.	140 Lbs.
8"	10"	20 Ft.	180 Lbs.
8"	12"	20 Ft.	200 Lbs.
10"	14"	20 Ft.	280 Lbs.
12"	16"	20 Ft.	360 Lbs.
14"	16"	20 Ft.	390 Lbs.

Weights and Dimensions of INSUL-TEK® PVC Based Upon Standard PVC Casing.

* Please note other insulation thicknesses and classes of pipe are available upon request.



Specifications for INSUL-TEK® PVC Piping

A preinsulated piping system for above and below ground use on systems with temperatures ranging up to 100° F.

MATERIALS:

All pipe shall be factory preinsulated INSUL-TEK® PVC as manufactured by Preinsulated Piping Systems, Inc.

CARRIER PIPE:

Polyvinylchloride (PVC) SDR - 26, Class 160 conforming to ASTM D-2241 in 20 Ft. lengths. Maximum hydrostatic working pressure of 160 psi @ 73° F.

INSULATION:

Foamed in-place closed cell polyurethane foam completely filling the annulus between the carrier pipe and jacketing.

All exposed ends of the insulation shall be protected with a factory applied moisture barrier. (Heat shrink end seals are available as an option.)

Typical Mechanical Properties

Core Density

2.1 P.C.F., ASTM D-1622

Closed Cell Content

90 to 95% ASTM D-2856

"K" Factor, BTU/hr. in/ft² /°F @ 73° F

.14 ASTM C-518

OUTER CASINGS:

PVC (Standard):

Extruded White Polyvinyl Chloride (PVC) Type 1, Grade 1, Class 12454-B per ASTM D 1784

FRP:

Fiberglass Reinforced Plastic (FRP) comprised of isophthalic polyester resin and fiberglass strand. Minimum wall thickness to be 1/8" thick.

HDPE:

Black High Density Polyethylene Resin Type III, Grade P34, Under ASTM D-1622

Tensile Yield Strength

3300 psi ASTM D-638

Ultimate Elongation

850% ASTM D-638

Tangent Flexural Modulus

175,000 psi

Spiral Lockseam:

Galvanized Steel, Aluminum, and Stainless Steel with standard outer lockseam.

* For optional casings, consult the Casing Selection Guide.



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FITTINGS (Bell & Spigot):

On pipe sizes 1-1/2" to 8", fittings shall be constructed of PVC of the same type and pressure rating as the straight lengths of pipe to which they are connected with rubber sealing rings. Fittings for 10" and 12" shall be ductile iron.

THRUST BLOCKS:

All underground fittings such as elbows, tees, reducers, dead-ends, etc., shall be uninsulated and poured in concrete thrust blocks. The concrete thrust block will transfer the contraction and expansion of the piping system to the gasketed rubber sealing rings utilized on the straight joints.

FIELD JOINTS:

Bell by spigot pipe shall be joined with rubber ring gasket seals conforming to ASTM D-1869. Field Joints will be uninsulated.

BACKFILLING:

The trenches shall be carefully backfilled and hand tamped in 6" layers until a cover of at least 24" from the top of the pipe has been achieved. The first 12" of backfill shall be sand or fine gravel less than 1/2" in diameter. The remainder of the backfill shall be free of rocks, frozen earth and foreign material over 6" in diameter. The trench shall be compacted to comply with H-20 highway loading.



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