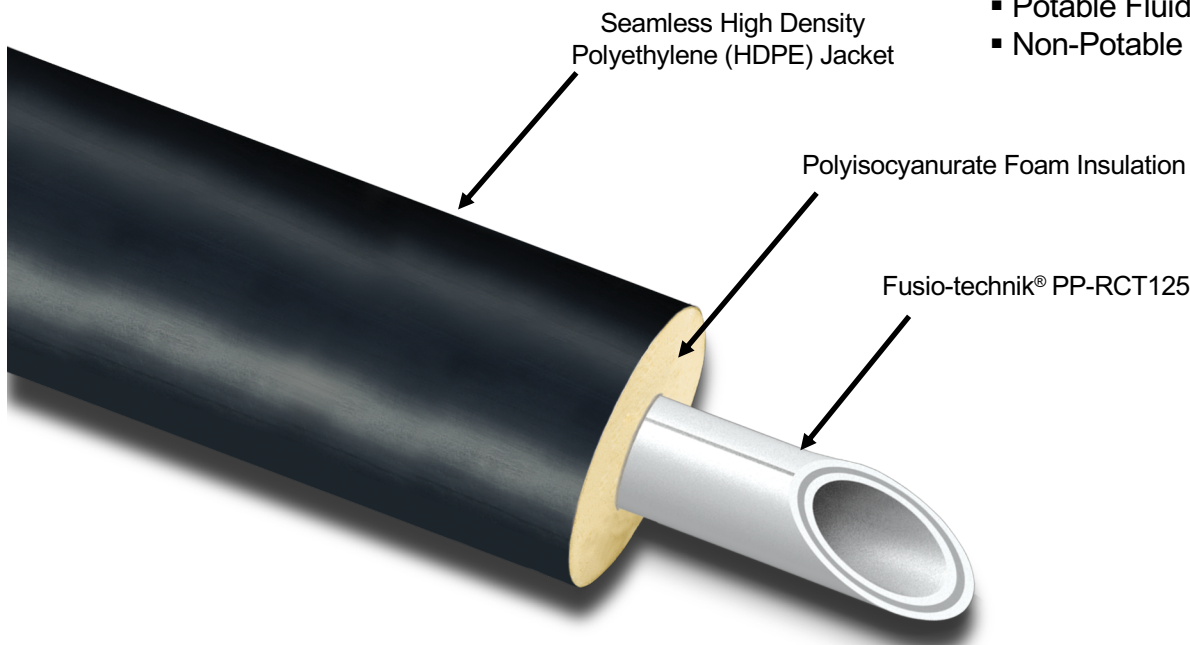


## Below Ground Pre-Insulated Foam with Fusio-technik® PP-RCT125

The only approved industrial strength pipe of its kind made for long-term durability in high temperature/pressure applications

- Hot & Cold Fluids
- Potable Fluids
- Non-Potable Fluids



Rovanco's® Pre-Insulated Below Ground piping system with Fusio-technik® PP-RCT125 WOR carrier pipe is designed to be the most efficient, constructible and sustainable piping system for most plant systems, hot/cold fluids, potable and non-potable fluids and other below ground applications.

The Fusio-technik® PP-RCT125 carrier pipe is produced using White Oxidation Resistance (WOR) and is resistant to lime, cement, plaster and electro-chemical reaction. It leads the market for high flow rate & low pressure drop applications, has reduced permeability to oxygen and is completely compatible with warm and cold fluids as well as drinking water.

Rovanco's® polyisocyanurate foam insulation is a proprietary blend that has one of the highest K factors in the industry while still being meeting ASTM E-84 Flame/Smoke standards.

This piping system is encased in a seamless high density polyethylene jacket. The jacketing material Rovanco® uses is durable and thicker than the industry standard.

To find out more about Rovanco's® Pre-Insulated Below Ground piping with Fusio-technik® PP-RCT, you can visit our factory, phone us (815) 741-6700, visit our website at [www.rovanco.com](http://www.rovanco.com) or e-mail us at [marketing@rovanco.com](mailto:marketing@rovanco.com).

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# SPECIFICATION FOR Below Ground Pre-Insulated Foam with Fusion-technik PP-RCT125 Carrier

## Carrier Pipe:

Pipe shall be manufactured by Aquatechnik® Polypropylene Random Co-Polymer, Fusio-technik® PP-RCT 125WOR resin meeting the short-term properties and long-term strength requirements of ASTM F 2389-17 and contain “White Oxidative Resistance”, (WOR). The pipe shall contain no rework or recycled materials and manufactured only from “virgin” resins. All pipes shall be made in a three-layer extrusion process. All pipes shall comply with the rated pressure requirements of ASTM F 2389-17. All pipe shall be certified as complying with NSF 14, NSF 61, NSF 51, ASTM F 2389-17 and CSA B137.11.

## Carrier Pipe Fittings:

Injection molded fittings shall be provided on all fittings through 12” diameter unless otherwise approved as a “custom fitting” and manufactured from a high-quality Polypropylene Random Co-Polymer, PP-R Super 80 SDR5 resin meeting the short-term properties and long-term strength requirements of ASTM F 2389-17A. The fittings shall contain no rework or recycled materials and manufactured only from “virgin” resins. All fittings shall be certified by as complying with NSF 14, NSF 61, NSF 51 and ASTM F 2389 or CSA B137.11.

Fittings larger than 12” diameter shall be fabricated by Aquatechnik® North America using the same piping material furnished for the piping application and complying with NSF 14, NSF 61, NSF 51 and ASTM F 2389-17 or CSA B137.11.

## Insulation:

Carrier pipe insulation shall be HiTherm PIR300 25/50 polyisocyanurate foam injected with one shot into the annular space between carrier pipe and jacket. Insulation shall be rigid, >90% closed cell polyisocyanurate with a minimum 2.0 lbs per foot<sup>3</sup> density, compressive strength of 30 psi @ 75°F, an initial thermal conductivity K factor no higher than 0.14 @ 75°F per ASTM C-518 and meet E84 25/50 flame/smoke passive fire resistance rating. Maximum continuous operating temperature of polyisocyanurate foam shall be -297°F to 300°F with infrequent allowances for intermittent spikes up to 350°F.

## Insulated Fittings & Joints:

All straight joints and fitting joints shall be insulated using material supplied by system manufacturer.

## Jacketing Material:

The outer casing shall be seamless high density polyethylene (HDPE) conforming to ASTM D3350. Type III, Category 5, Class C and Grade P23/P34. With a minimum of 2% by weight of carbon black. Minimum thickness is 175 mils. For actual thickness contact Rovanco® or see official submittal documents. No FRP overwrap or sprayed jacketing will be allowed. Average jacket thickness shall be in accordance with table below.

Jacket Size In Inches*	Jacket Thickness In Mils
6.60	200
6.60	200
6.60	200
6.60	200
8.00	175
10.00	175
10.00	175
12.43	175
14.06	175
15.87	175
17.83	175
19.80	200
22.17	200
24.17	225
26.26	200
31.64	225
31.64	445
36.00	445

\* Larger jacket sizes available.

## Backfill:

Should be tamped compactly in place so as to assure a stable surface. No rock should be used in the first foot of backfill. 24 inches, top to pipe to grade, of compacted fill shall meet H-20 Highway Loading.

## Manufacturer’s Assistance:

Rovanco® will provide a field service man on-site to properly train the installing personnel in all phases of installation, (if required).

## Approved Vendor:

The Rovanco® Pre-Insulated Below Ground Foam Piping System is engineered with Fusio-technik® PP-RCT 125 carrier pipe. All other manufacturers wishing to bid on this project must be ISO 9001 certified and provide the engineer with certified test data from either foam manufacturer or an independent testing agency that the product is capable of withstanding the service temperature continuously. The manufacturer shall obtain written approval from the engineer 10 days prior to bid date.

Contact our home office or local representative for insulation sizing.

cc #03222024

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## Contact Rovanco® for the name of your local Representative

20535 S.E. Frontage Road • Joliet, Illinois 60431 • (815) 741-6700

Website: [www.rovanco.com](http://www.rovanco.com) • E-mail: [marketing@rovanco.com](mailto:marketing@rovanco.com)

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