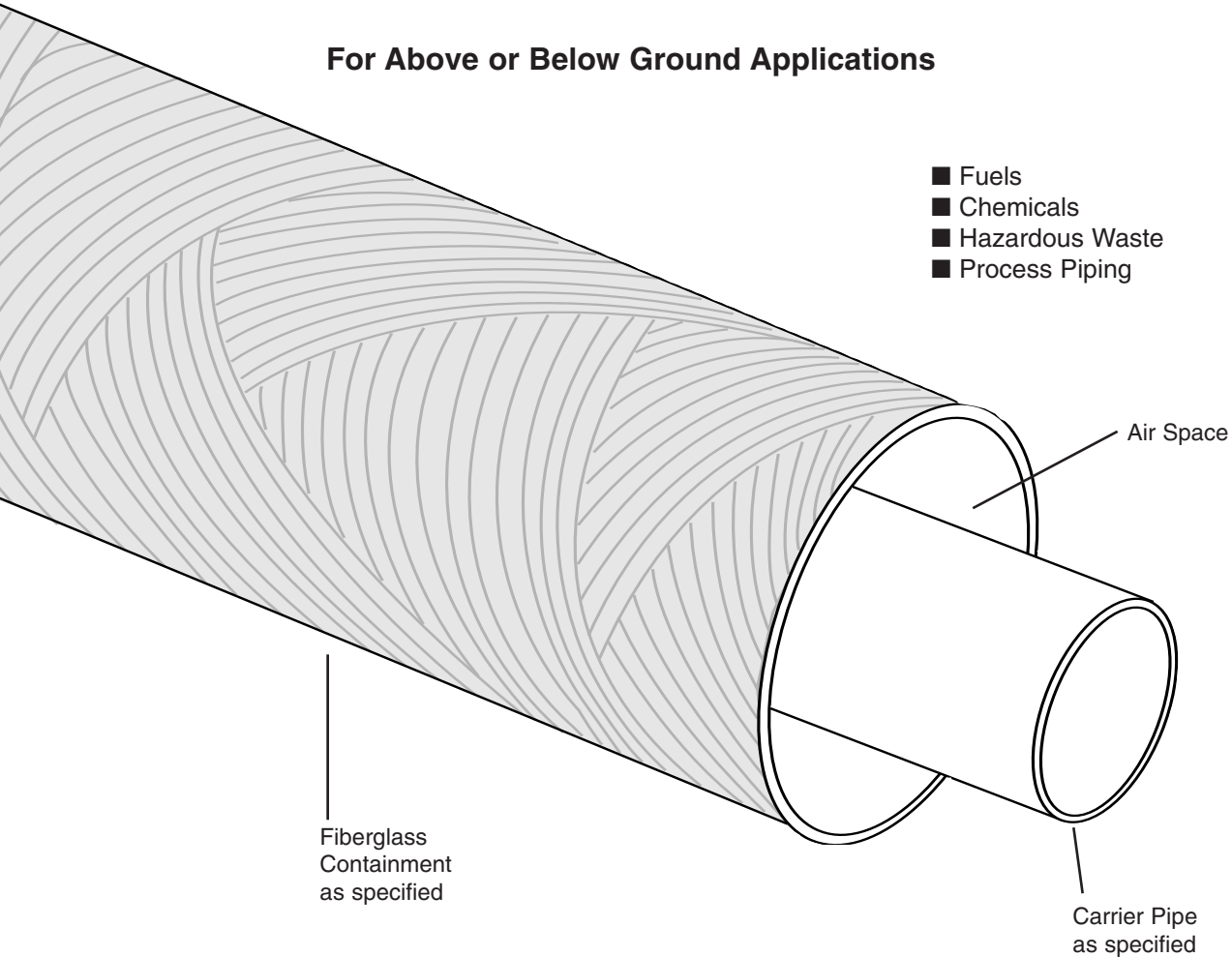


# Rovanco FRP Containment

## For Above or Below Ground Applications



Rovanco's FRP System is designed for applications of high quality with durable FRP casing. It is supplied with spooled out, part numbered, cut-to-length pieces factory manufactured to field dimensions. All elbows, tees and end seals are manufactured at Rovanco's plant.

FRP containment comes complete with joint kit with adhesive, and accessories as required for the installation.

To find out more about Rovanco's PVC containment system, you can visit our factory, phone us (815)741-6700, fax us (815)741-4229, visit our web site at [www.rovanco.com](http://www.rovanco.com) or e-mail us at [marketing@rovanco.com](mailto:marketing@rovanco.com).

# SPECIFICATION DATA SHEET

## Fiberglass Containment Piping System for Underground

### Carrier Pipe Types:

#### PVC

Schedule 40/80 solvent weld.

#### Type (K) or (L)

Hard Drawn Copper Tubing conforming to ASTM B-88.

#### Steel

A-53 Grade B ERW or seamless Steel in Schedule (40) or (80).

#### Fiberglass

Series 2000 Bondstrand\* filament wound fiberglass reinforced epoxy, bell, and spigot, designed to withstand 250°F. Pipe to be in conformance with MIL-SPEC P28584A and P22245A.

Series 3000 Bondstrand\* filament wound fiberglass reinforced epoxy, bell, and spigot, designed to withstand 210°F. Pipe to be in conformance with MIL-SPEC P29206A.

Other carrier pipe types are available upon request.

Factory fabricated and pre-engineered to actual field dimensions.

### Containment Material:

Filament wound fiberglass pipe constructed of continuous glass fibers in a matrix of aromatic amine cured epoxy resin. In a dual angle pattern that takes optimum advantage of the tensile strength of the filaments. Incorporating an integral liner rated for 150 psi at 210°F and manufactured to ASTM-D2996 standards. Classified ASTM-D2310, Type 1, Grade 1 and Class F. Use Ameron Bondstrand 3000A.

### Inner Pipe Supports:

All pipe shall be aligned and supported within the outer casing with nonmetallic pipe supports designed to allow free air and fluid movement within the containment pipe. The supports will be designed and spaced to carry the weight of the carrier pipe full of fluid with a 50% safety factor while allowing the carrier pipe to expand and contract.

### Joining Method:

Pipe and Fittings will be joined using a thermosetting epoxy resin. Mechanical joints or O-Ring seals will not be allowed.

### Fittings:

All fittings will be filament wound, heavy duty, bell & spigot type with a .020 interior liner in conformance with MII-P28584A and MIL-P22245A. 90° elbows will be long radius only.

### End Seals:

Terminal ends of containment inside manholes, pits, or building wall shall be equipped with end seals.

End seals with drain or vent openings located diametrically opposite on the vertical center line of the mounting plate and shall be shipped to the job site with plugs in place. Terminate all containment 2 inches beyond the inside face of building walls.

### Anchors:

FRP pipe should be joined to steel systems inside buildings with flanges. All steel systems should be anchored within five feet of connection point to eliminate any thrust, stress, or torque from the steel pipe being transferred to the FRP. Steel flanges should be 150# flat faced.

### Field Tests:

The inner pipes of this system shall be tested hydrostatically to 1 1/2 times the working pressure of the line. If a leak is found, it shall be repaired and the test repeated. The outer casing shall be tested with air at 5 psig max. and a soap solution shall be applied to the field joints to locate leaks. If leaks occur, it shall be repaired and the test repeated.

### 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 of 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.

### Approved Vendors:

FRP Containment Pipe System by Rovanco, Joliet, Illinois or approved equal. Any alternate supplier must submit their technical data to the engineer ten days prior to bid date to be approved in writing as an equal.

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## Contact Your Rovanco® Representative

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