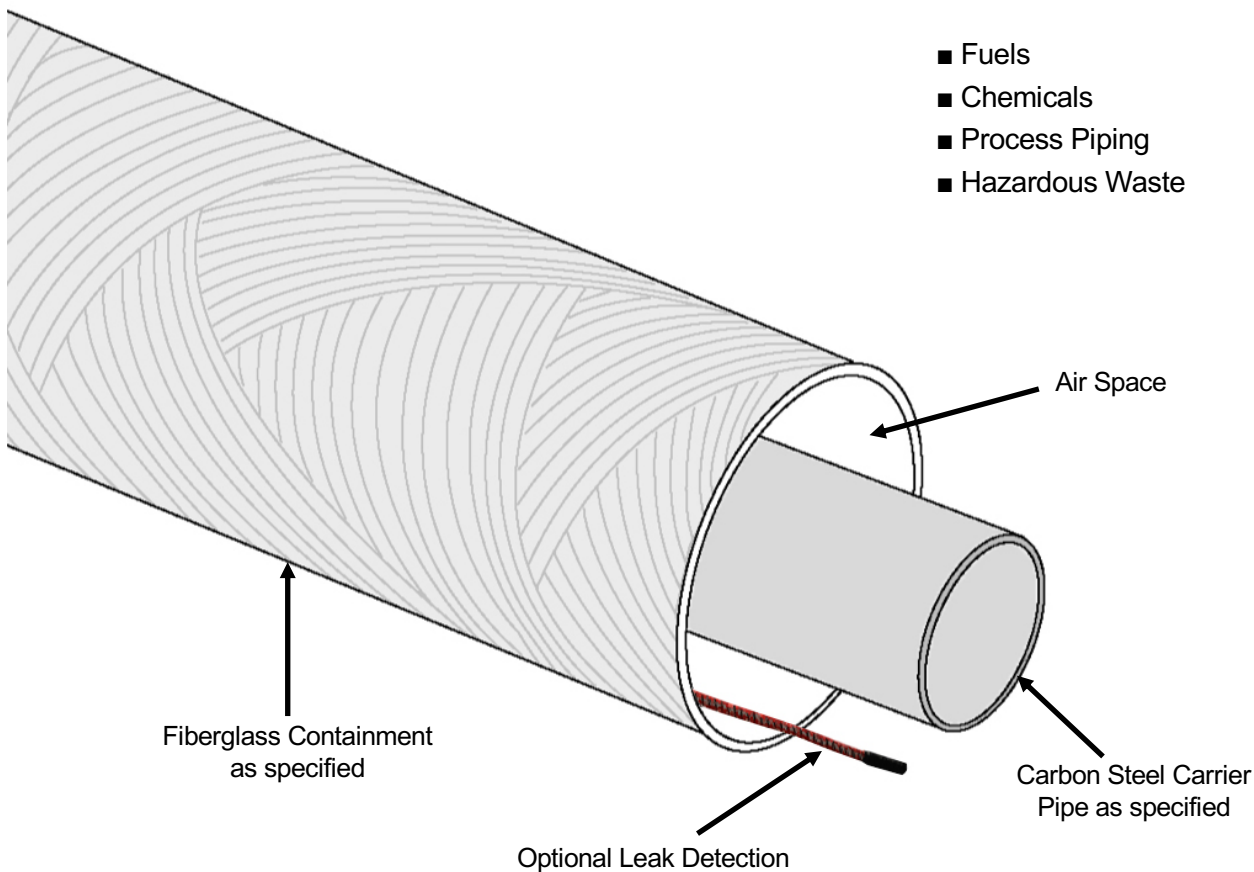


# Rovanco FRP Containment for Fuel Handling

For Above or Below Ground Applications



Rovanco's FRP Containment System is designed for applications related to fuel handling with an industry specified Red Thread IIA casing. All elbows, tees, and end seals are supplied as a standard product for field fabrication.

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

Optional Leak Detection is available.

To find out more about Rovanco's FRP Containment System for fuel handling, you can visit our factory, phone us (815) 741-6700, fax us (815) 741-4229, visit our website at [www.rovanco.com](http://www.rovanco.com) or e-mail us at [marketing@rovanco.com](mailto:marketing@rovanco.com).

*This is a generic product datasheet and is not intended for submittal use.*

## **GUIDE SPECIFICATION**

### **FRP Containment Piping System for Fuel Handling for Above & Below Ground**

#### **Carrier Pipe:**

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

Other carrier pipe types are available upon request.

#### **Containment Pipe Material:**

Red Thread IIA – Pipe is manufactured by filament winding process using amine-cured epoxy thermosetting resin to impregnate strands of continuous glass filaments with a resin-rich interior surface. The operating pressure of the pipe is up to 250 psig (17.2 bar) with continuous operating temperature to 150°F (66°C). Red Thread IIA is Listed with UL Standard 971-2004 for non-metallic underground piping for motor vehicle, high blend, concentrated and aviation and marine fuels. ID of pipe to be 20' random lengths. Pipe to be in conformance with ASTM D-2996.

#### **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 and spigot type. 90° elbows will be long or short radius.

#### **End Seal:**

Terminal ends of containment inside manholes, pits, or building walls 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.

#### **Anchor:**

FRP pipe should be joined to steel systems inside building 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 pipe of the 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, they shall be repaired and the test repeated.

#### **Backfill:**

Should be tampered compactly in place so as to assure a stable surface. No rock shall 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 serviceman on-site to properly train the installing personnel in all phases of installation.

#### **Leak Detection:**

For optional Leak Detection for this system is available, please contact Rovanco.

#### **Approved Vendors:**

FRP Containment System by Rovanco, Joliet, Illinois or approved equal. Any alternate supplier must be ISO 9001 certified and submit their technical data to the engineer ten days prior to bid date to be approved in writing as an equal.

cc #04092024

Copyright 2024 – Rovanco's products are covered by various U.S. patents. Rovanco & Insul-8 are federally registered trademarks.

**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)

*This is a generic product datasheet and is not intended for submittal use.*