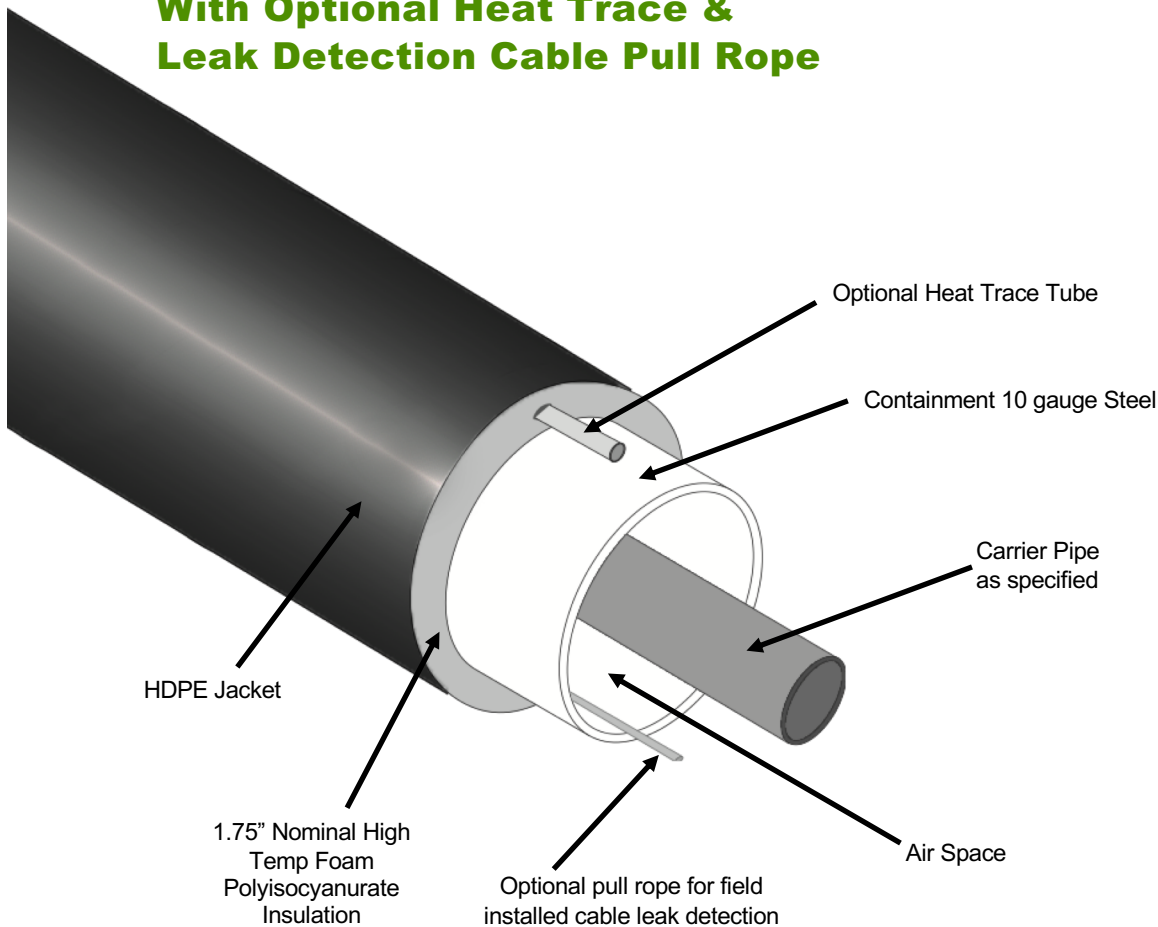


Insul-800 Below Ground Containment by Rovanco

With Optional Heat Trace & Leak Detection Cable Pull Rope



Rovanco's Insul-800 Below Ground Containment with optional Heat Trace and Leak Detection Cable Pull Rope is designed for below ground systems and is suitable for indoor & outdoor applications.

Non-Flammable polyisocyanurate insulation and durable high density polyethylene jacket supplied 20' or 40' lengths, means an economical, high-quality system.

Rovanco's Insul-800 Below Ground Containment with optional Heat Trace and Leak Detection Cable Pull Rope is provided with a HDPE jacket. Fittings, anchors & end seals are factory fabricated by Rovanco.

Rovanco's systems are engineered to the latest edition of ANSI B31.1.

The Insul-800 System comes complete with connector bands, joint insulation materials, HDPE jacketing and shrink wrap to make the installation completely watertight for below grade applications.

To find out more about Rovanco's Insul-800 Below Ground Containment System, you can call your local representative, phone us at (815) 741-6700, fax us at (815) 741-4229, visit our website at www.rovanco.com, or email us at marketing@rovanco.com.

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

Standard Specification

Insul-800 Below Ground Containment System with optional Heat Trace & Leak Detection Cable Pull Rope

Carrier Pipe:

All carrier pipe shall be carbon steel A-53-B ERW. Pipe 10" and smaller shall be Schedule 40. Pipe 12" and larger shall be .375 wall. Schedule 80 shall be used for condensate lines 10" and smaller, XH for 12" and larger.

Other pipe types also available (steel, copper, stainless steel, etc)

Inner Pipe Supports:

All pipe shall be aligned and supported within the inner containment casing with galvanized steel supports spaced on 10' centers. The carrier pipe shall bear directly on the steel support. The support shall be designed to permit drainage and free air passage.

Containment:

Containment shall be 10 gauge steel, or as specified. The interior surface shall be smooth to permit free moisture drainage and removability of the inner assembly. The Containment shall be sized to provide an adequate annular space between the outer surface of the carrier pipe and the interior surface of the containment. Containment field joint closures shall consist of 10 gauge steel and shall be field welded over adjacent units.

Containment Insulation:

300° F polyisocyanurate foam insulation has an initial K factor of .14, density of 2.0, closed cell content of >90%, compressive strength of 30 psi, and continuous service temperature of -297° F (-182° C) to 300° F (148° C). Conformance with ASTM Standards D1621, 1622, 2126, 2842, 2856, C518 and E96. Completely filling the annular space between the containment casing and jacketing. Provide written independent performance certification with submittals. Meets 25/50 Flame/Smoke Rating ASTM E-84.

400° F polyisocyanurate foam insulation has an initial K factor not higher than .145, density of 2.5, closed cell content of 87%, compressive strength of 30 psi, and continuous service temperature of 400°F. Insulation must be capable of handling intermittent temperature spikes to 450°F. Conformance with ASTM Standard D1621, 1622, 2126, 2842, 2856, C518 and E96. Completely filling the annular space between the inner casing and outer jacketing. Provide written performance certification with submittals.

Outer Jacket:

The outer casing shall be 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.

Insulating Straight Joints:

Field joints shall be insulated with rigid half shells of 300° F or 400° F high temp polyisocyanurate foam insulation (on conduit). Optional RhinoJoints by Rovanco or approved equal can be specified. RhinoJoint shall be certified EN 489, certification required at bid time.

Expansion Loops and Elbs:

Expansion loops, expansion elbows and other fittings shall be pre-fabricated and furnished in the same types and thickness of insulation and casing as those for the straight section of the piping system. They will be of a size to permit the inner pipe or pipes to expand and contract without damage to the insulation material.

Fittings

All changes in direction of the carrier pipe shall be made with fittings. Mitering of pipe will not be permitted. When tee branches are smaller than the main pipe join, weld-o-lets may be used. All weld fittings shall be the same wall thickness as adjacent piping.

Anchors, End Seals and Gland Seals

To be determined based the system layout & temperatures.

Field Tests

The carrier pipe shall be field tested hydrostatically to 1 1/2 times the working pressure of the line or as specified. The 10 gauge steel inner containment casing shall be tested with air at 15 psig. All leaks shall be repaired and the test repeated. After test, all field joints shall be insulated and sealed water tight.

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.

Installation

The installation shall be made in accordance with plans, specifications, and manufacturers' installation instructions. Pipe system supplier will provide an installation instructor on site to train the contractor in all phases of installation if required.

Heat Trace Tube & Leak Detection Pull Rope (optional):

Contact Rovanco for Heat Trace and Leak Detection options.

Approved Vendors

Insul-800 Below Ground Containment manufactured by Rovanco, Joliet, Illinois, 815-741-6700, or approved equal. Any alternative supplier wishing to be approved as an equal must be ISO Certified and submit their technical data and insulation material test reports.

These reports must be certified by an independent Testing Agency that the polyisocyanurate insulation have been tested to and meet all ASTM standards listed in the "inner containment insulation" section of the specifications. These reports must be submitted to the engineer ten days prior to bid date for an alternate ISO Certified supplier's product to be approved in writing as an equal to the specified products.

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Contact Rovanco® for the name of your local Representative

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