Rovanco Piping Systems

PRE-FABRICATED MANHOLES

Factory Coated and Equipped
With A 50-Year Cathodic Protection System!

Rovanco’s Pre-Fabricated Manholes create a dry ventilated environment and reduce construction costs.
Rovanco’s Pre-Fabricated Manholes are:

- Totally welded steel
- Factory pressure tested
- Leak Proof
- Factory coated
- 50-year cathodic protection system

They create a dry ventilated environment for your:

- Valves
- Steam traps
- Expansion joints

They reduce the construction costs because they are:

- Pre-Fabricated
- Pre-Piped
- Pre-Insulated
Rovanco pre-fabricated steel manholes can play an important role in your underground heat distribution system.

Rovanco Pre-Fabricated Manholes can be installed in one day!

Allow you to accelerate the placement of manholes to get streets open in three days or less.
- One day to excavate and set the manhole
- One day to hook up the pipes entering and leaving the manhole
- One day to touch-up coating, apply anodes and backfill.

The average construction time for field built concrete manholes is 2-3 weeks plus time to pipe and finish the inside. Using precast sections you might save 1 week.

Since the Rovanco manholes are custom-made you can choose what thickness of the base and top you want. • Round • Square • Rectangular • Oblong

Rovanco is currently building 7 manholes rated for fire trucks filled with 40,000 pounds of water. So Rovanco can build manholes of any size up to 45' long, 10 foot wide, and 10 foot high. H-20 loading available.

Contact Rovanco NOW for assistance on your next steam, condensate or manhole project!
**STANDARD SPECIFICATIONS: PRE-FABRICATED MANHOLES**

Manholes shall be custom fabricated to project specifications. The manholes shall be air pressure testable, made up of the subcomponents listed below and shall be shipped complete from the plant to the job site. The following materials will be provided unless otherwise specified in the contract document.

**Carrier Piping in Manholes:**
The carrier piping in pre-fabricated manholes shall be identical to the piping of the pre-fabricated piping connecting to the manhole. Suitable supports for piping shall be provided where required.

**Insulation of Carrier Piping & Valves:**
The insulation shall be mineral wool or calcium silicate in accordance with manufacturers’ recommendations. Thickness for each pipe size shall be equal to that used in the adjacent conduit. Insulation shall be covered with a .016” thick metal jacket, fastened at maximum 18” centers with 32 gauge stainless steel strap conforming to ASTM A-167, type 304.

**Manhole Shell:**
The body of the manhole shall be 1/4” minimum thick black steel plate conforming to ASTM A-36. The top and bottom plate shall be 1/2” minimum thick black steel plate conforming to ASTM A-36. The top or bottom plate shall be a minimum of 2” larger in diameter than the body. Structural steel I-beams or channels, conforming to ASTM A-36, shall be welded to the top and bottom plate as required. Lifting eyes shall be attached to the top plate as required.

**Sump Pit:**
A 12” diameter sump pit shall be located in every manhole. The pit shall be a minimum of 8” deep. The sump shall be constructed with 3/8” minimum steel plate conforming to ASTM A-36.

**Stub Outs:**
Stub outs shall be located on the manhole at elevations and locations as required. These stub outs shall have the same carrier pipe, insulation and conduit/jacket and shall be made to fit with adjoining section of the conduit system.

**Air Vents:**
Each manhole shall have two air vents for ventilation. They shall protrude through, and will be welded to, the top plate. One shall extend to 12” above the bottom plate and the other shall terminate 3” below the top plate. The vents shall extend at least 6” above grade or as specified in the contract documents. A 180 degree elbow (gooseneck) shall be provided with each vent line. The vent lines shall be constructed of 4” 10 gauge epoxy coated steel pipe.

**Manhole Access:**
Access to the manhole shall be provided by a 30” diameter, 1/4” minimum wall thickness steel tube conforming to ASTM A-139, which shall be welded to the top plate. The access tube shall extend a minimum of 6” above grade, or as specified in the contract documents. An air tight cover shall be provided on the top of the access tube. This cover is sealed with a ring gasket and 16 equally spaced bolts conforming to ASTM A-307. The cover is made of 8 gauge minimum steel. The ring gasket shall be suitable for temperatures up to 212˚ F.

**Ladder:**
A ladder for entry shall extend through the access tube down through the manhole body to the floor. The ladder shall have non-slip surfaces and shall be constructed of 2” by 1/4” steel uprights conforming to ASTM A-36 stamped and forged ladder rungs.

**Valves and Internal Components:**
Valves and internal components shall be provided as described in the contract documents.

**Protective Coatings**
The exterior surfaces of the manhole shall have a factory applied coating: minimum 8 mils dry film of glass flake reinforced epoxy. The interior of the manhole and all internal components, excluding the jacket/insulated pipes and accessories, shall be coated with 6 mils minimum of a high temperature coating. In some cases, parts of the manhole can be galvanized if required. Consult Rovanco for special pricing and details.

**Installation**
The manholes shall be installed at the locations shown on plans. A monolithic concrete anchor block shall be poured by the installing contractor, so as to provide adequate keying and shall be of sufficient size to prevent manhole floatation.

As an option, cathodic protection can be supplied by Rovanco.