PREFABRICATED MANHOLES

Prefabricated, Watertight, Ready-To-Install
PERMA-PIPE prefabricated manholes are delivered to the job-site ready to install, quickly and easily. Just lower the complete unit into the excavation and connect to the underground distribution system. To prevent flotation, encase the bottom plate in a concrete pad.

REDUCE ON-SITE TIME AND LABOR, PINPOINT COSTS WITH PERMA-PIPE® PREFABRICATED MANHOLES

PERMA-PIPE prefabricated steel manholes reduce installation and maintenance costs, possess outstanding strength and durability and provide an easily accessible control and inspection center for underground piping systems.

COMPLETELY PIPED, DELIVERED READY TO INSTALL

Each manhole is designed for individual job needs, delivered to the site complete with factory pretested valves, fittings, insulation and other specified equipment in place. Therefore, you know in advance exactly what your costs will be. There are no on-site construction delays, no improvising and no lengthy laborious installation procedures. Diameters range from 4 feet through 10 feet and can be furnished in virtually any height.

PERMANENT INSTALLATION

PERMA-PIPE prefabricated manholes are constructed of 1/4 inch minimum smoothwall black steel. To protect against corrosion, outer surfaces are coated with spray-applied urethane to a minimum thickness of 30 mil. A phenolic paint is used to protect interior surfaces from corrosion.
WATERTIGHT, YET IT BREATHES

PERMA-PIPE manholes are built to stay permanently dry. Each manhole is air-tested to assure watertightness and when connected to air-testable conduit, forms a completely watertight component. High and low vents provide air circulation and keep temperature and humidity closer to ambient.

PROVIDES A DRAINABLE, DRYABLE, TESTABLE SYSTEM

One-inch vents are welded to the conduit ends. Holding a mirror to the vent gives a fast, positive check if moisture is present. If the conduit is wet, it can be drained, the insulation dried and the conduit air-tested to make sure it is still watertight.

Every PERMA-PIPE prefabricated manhole is supplied with all specified piping and accessories completely installed, factory tested and insulated as specified. Standard features also include 1/4 inch black steel outer shell, conduit stub-outs, end seals, steel ladder, vents, sumps and lifting eyes. Both inner and outer surfaces are covered with a protective coating.

Prefabricated manholes are available in standard sizes from 4 feet through 10 feet in diameter and can be built to varying height requirements. The entry tube is 30 inches in diameter and easily accessible. The lid is held secure and pressure-tight with four bolts. To assure watertightness, each manhole is air-tested.
PREFabricated Manholes

Standard Design Features

Piping and insulation - Completely installed as specified.

Outer Shell - Black steel, 1/4" thick through 96", 3/8" thick above 96".

Conduit Stub-Outs - 10 gauge steel.

End Seals - Steel plates welded to pipe and conduit stub-outs, equipped with drain and vent openings.

Access - 30" diameter, 1/4" thick steel, waterproof cover with ring gasket and track head bolts. Cover and venting can be varied to suit grade or pavement requirements.

Ladder - Steel with 3/8' side rails, 15' wide, 3/4" diameter embossed rungs.

Manhole Vents - One high and one low vent, pipe 6 5/8" O.D. extending above grade with rain caps, provide maximum ventilation.

Sumps - 12 3/4" O.D. steel, 1/4" wall and 12" deep with 1/4" thick bottom.

Coating - Inside coated with phenolic paint, outside coated with spray applied urethane to a minimum thickness of 30 mil.

Lifting Eyes - Minimum of two, welded to top plate for easy handling.

Flextion Anchor - Oversized bottom bulkhead keyed into concrete base.

Conduit Vents - One-inch pipe from conduit terminal, ends extending above grade and terminating with 180° elbow, provides conduit ventilation and acts as system sentinel.

Cathodic Protection - Anodes can be provided as additional protection against corrosion.

Optional Cathodic Protection Safeguards Pipeline and Manhole.

Perma-Pipe manholes, as well as conduit, can be cathodically protected.

Cathodic protection prolongs manhole and conduit far beyond normal life.