

Complete Engineering - Our Speciality



For more Information
Contact

Amiantit Oman Co. LLC

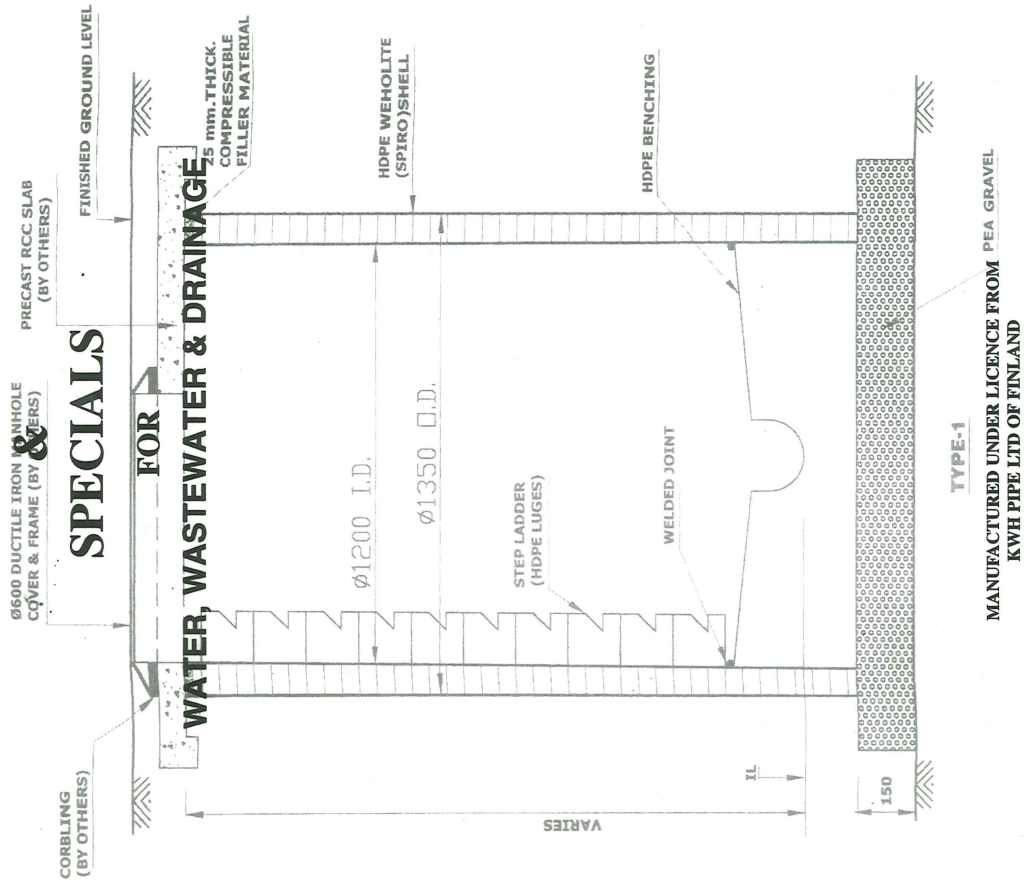
P.O.Box 417, Central Post Office, Postal Code 111, Sultanate of Oman

Telephone : +968 24446600 (6 Lines) - Fax : 24446611

Telex : 5304 AMIANTIT ON - e mail : amian@omzest.com - Website : www.amiantitoman.com



"WEHOLITE"[®]
HIGH DENSITY POLYETHYLENE
MANHOLES



Amiantit Oman Co. LLC

P.O.Box 417, Central Post Office, Postal Code 111, Sultanate of Oman
 Telephone : +968 24446600 (6 Lines) - Fax : 24446611

Telex : 5304 AMIANTIT ON - e mail : amian@omzest.com - Website : www.amiantitoman.com

"WEHOLITE"®
HIGH DENSITY POLYETHYLENE
MANHOLES & SPECIALS

ENGINEERED FOR WIDE RANGE OF SERVICES, FROM WASTE WATER AND STORM WATER DRAINAGE TO LANDFILL GAS & LANDFILL LEACHATE.

DESCRIPTION

HDPE Manholes are available in internal diameters ranging from 800mm up to 3000mm. The cylindrical carcass is fabricated from a TWIN WALL STRUCTURED HDPE PROFILE pipe (WEHOLITE)® and is provided with an eccentric or concentric reducing cone. The manhole depths to invert can range from 1 Meter to 15 Meter and above. The manhole is provided with inlets and outlet pipe and also with ladder (if required) and benching.

CONSTRUCTION

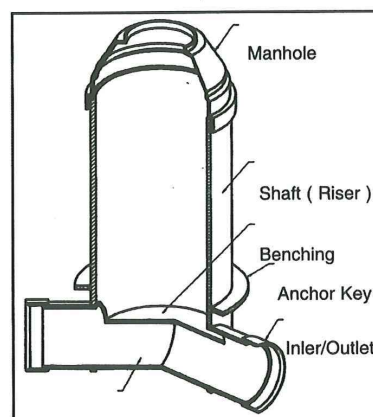
The top cone is from a homogenous moulding to match the diameter of the riser. The material is High Density Polyethylene of a grade which facilitates extrusion welding to the main shaft.

The base plate is constructed from High Density polyethylene plate stiffened to take the weight of maintenance staff.

The benching flow path is constructed from mitred pipes cut to suit the diameters of inlets and outlets. Benching is made to order and polyethylene ladders are added on customers' request.

The flow pipes are stiffened to take the weight of maintenance staff. Ladders are fabricated from 250 mm half pipe.

Access is via a top cone set concentrically or eccentrically to ensure that maintenance staff have easy and safe reach to the top of the ladder. All manholes are water tested prior to release from the factory.



INSTALLATION

The specialty in using, WEHOLITE HDPE MANHOLES as described above, is the ease of installation. It can be totally prefabricated at our works or at site, based on invert levels and orientation provided by the customer. The Manholes are leak-tested and certified before delivery to site. All it needs at site is a fairly stable foundation and effective backfilling and compaction.

HANDLING

Use lifting lugs provided on the manhole or use nylon slings with a spreader bar to hoist the manhole. Do not drop the manhole.

SITE PREPARATION

The Excavation at the MANHOLE location should be wide enough to accommodate the manhole with stub outs. Adequate working space should be provided around the Manhole.

FINISHING

The top slab is placed above the HDPE manhole, and a conventional Manhole cover is then fixed on the top slab. This completes the Manhole

"WEHOLITE" HDPE MANHOLES & specials are preferred in the Gulf region instead of conventional Manholes because of the following salient features;

" NON CORROSIVE PROPERTIES

- Safe
- Maintenance free
- Does not need internal and external Protective lining/coating

STRUCTURED PROFILE WALL CONSTRUCTION

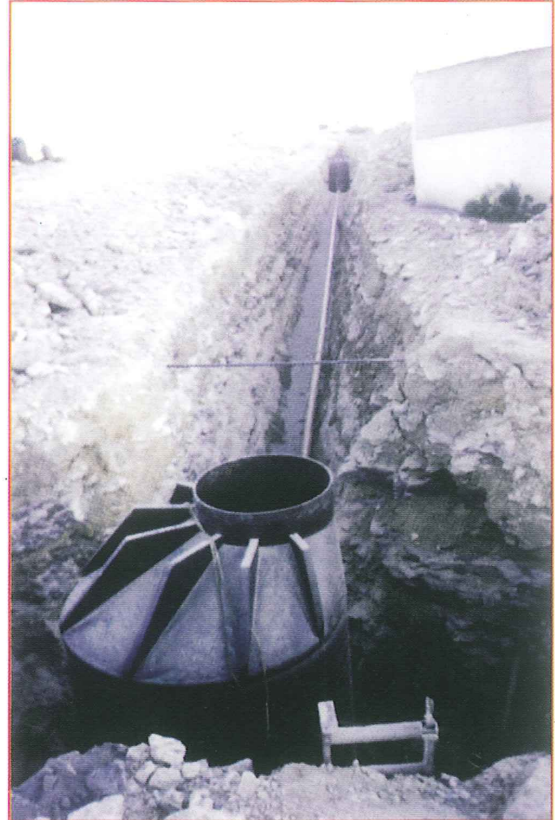
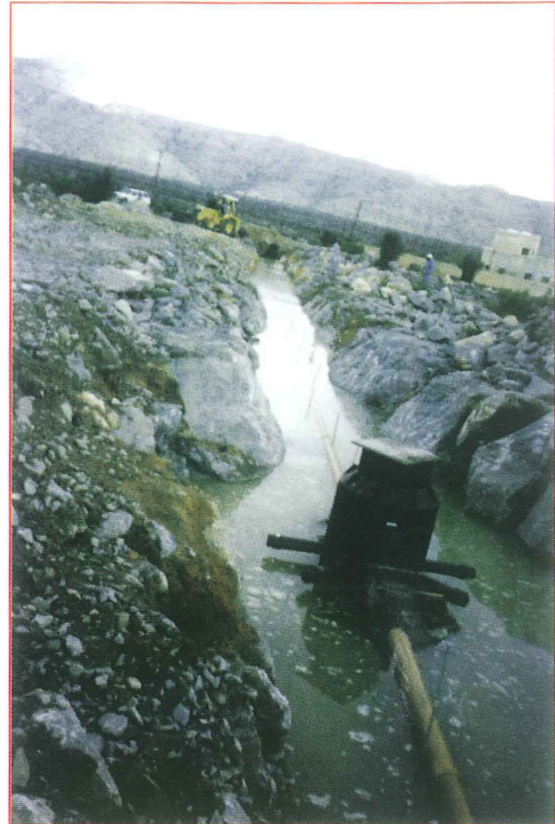
- Resists infiltration and ex-filtration
- Easier faster and safer installation

" LIGHT WEIGHT

- Easier handling
- Cost savings on installation time

" ENGINEERED CUSTOM BUILT PRODUCTS

- Rugged, dependable
- Dimensionally stable
- Precision fabrication
- Tested before installation
- 100% leak proof

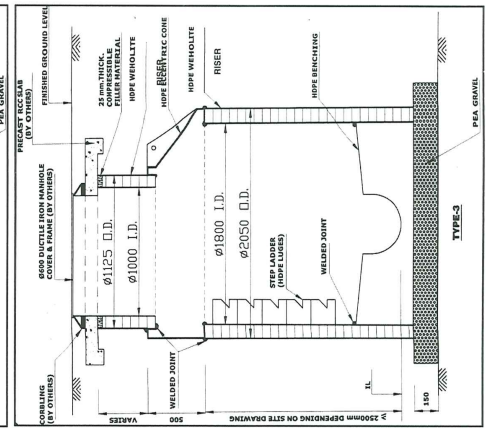
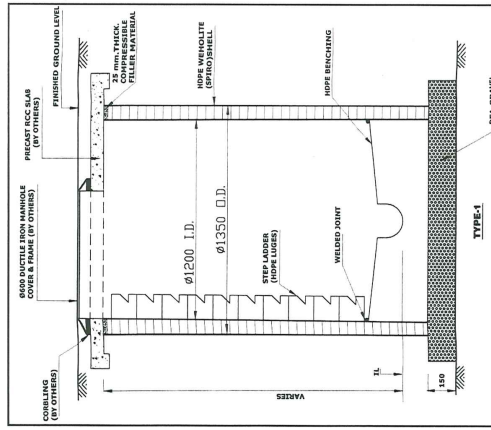
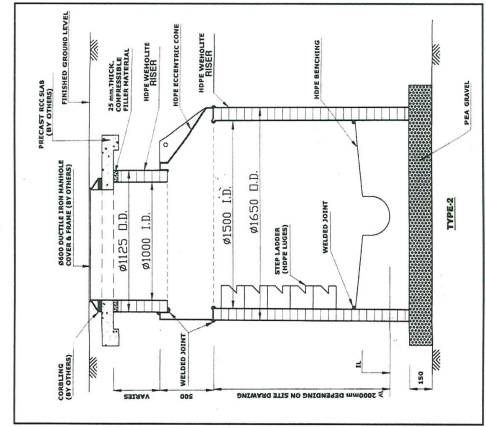


STANDARD MANHOLE DIMENSIONS

RISER ID	RISER OD	THROUGH PIPE ID
mm	mm	mm
1200	1354	300 to 700
1500	1685	300 to 800
1800	2022	300 to 1200
2000	2247	300 to 1400
2400	2672	300 to 1500
3000	3298	300 to 1800

Note :

- Through pipes of smaller diameter can be provided for all the above Riser pipes on request.
- Risers of other intermediate IDs are also available. Please contact Amiantif Oman for further information



CALCULATIONS FOR CHECK FOR FLOATATION OF HDPE MANHOLES / CHAMBERS

In areas where Ground Water Level is higher than the levels of Crowns of pipes connected to an HDPE Manhole / Chamber, the safety thereof against floatation (i.e. Buoyancy) should be checked and where necessary anti-floatation anchor should be provided.

A simple anti-floatation anchor consists of a HDPE sheet collar 20 -25 mm thick x OD = (OD of Manhole + 500 mm) extrusion welded on the external surface of Manhole. This results in additional soil weight acting downward and thus, increasing the Downward Thrust.

However, where substantial increase in Downward Thrust is required, it is necessary to provide precast / Cast-in-situ RCC anti-floatation anchors, as detailed in the sketches. The precast RCC anchor is in the form of a 0.3 m thick slab with mesh reinforcement. of sizes 1.2 x 1.5 m, 1.2 x 1.8 m and 1.2 x 2.4 m respectively for Manholes dia 1200 mm, 1500 mm and 1800 mm over the pipe stub-outs having a backfill cushion of 150 mm to 200 mm, as shown in the sketch.

The cast-in-situ RCC anchor is as seen in the photograph below.

