

Designing your dream home ?

Your last priority is our first.



Polyethylene Septic Tank

Design Reg No : 204722



R.C.C. Septic Tank

- Elevation
- Floor Tiles
- Wall Paint
- Electrical Fittings
- Bath Room
- Interiors
- Landscaping
- **Septic Tank**

UNITED
Septic Tanks

Company Profile

United Group with its Head Office in Thrissur, Kerala has been in business for a quarter of a century with varied interests in the manufacturing of building materials like Asbestos cement pipes, R.C.C. hume pipes, R.C.C. Septic Tanks, Polyethylene Septic Tanks, Water Tanks, Plastic Mirror cabinets, Mirror frames and Ceramic Sanitary wares. United has developed a patented domestic **Sewage Treatment Plant** with the assistance of CSIR (Council of Scientific and Industrial Research, Ministry of Science and Technology, New Delhi.)

United Sanitation Devices is a leading manufacturer of Polyethylene and R.C.C. Septic Tanks for the past 25 years. Thousands of septic tanks have been installed all over S.India. The advanced technology and strict Quality Control procedures during the manufacture of United Septic Tanks guarantees our product and the personal endorsement of our customers support this claim. Arrangements are made for an in-house demo of United Septic Tank in our Head office. Custom built models are also available for domestic and community purposes. Another feather in our cap is the on time supply of 15000 numbers of polyethylene septic tanks to UNICEF projects in South East Asia.



Did you treat the 'Elements' right ?

Panchabhutha, the five elements which constitutes earth, wind, fire, water, and space are very important to our existence. Treating these elements in the right process can bring maximum benefits out of it. Bhoomipooja, a ceremony usually performed before beginning the construction of a house or building is to treat earth, one of the elements in the best deserving fashion.

The earth and the environment surrounding the building are to be kept clean and hygienic at all times. A septic tank designed with advanced technology using strong nondegradable, noncorrosive material without any seepage can only do justice in treating the element 'earth' right.

Bacteria Kills.... for a better cause here !

A septic tank is a processing tank and not a dumping tank. The process taking place inside the tank is by bacteria. Without their hard work, your tank would fill within a few months. We at United make the right environment for these favorable bacteria to work at their best.



Domestic Sewage Treatment Plant

We have developed a new patented Sewage Treatment Plant for independent houses, designed to treat 1000 Ltrs per day, both Black and Grey water.

This system has been developed with the assistance from C. S. I. R. (Council of Scientific and Industrial Research, Ministry of Science and Technology, N. Delhi). The unit consists of four identical modular tanks, made of polyethylene. The first two tanks work with the help of anaerobic bacteria and the rest two tanks work with the help of aerobic bacteria.

All off gases from the tank is collected through vent pipes of each tank and is deodorized in a gas bio filter before venting to the open air. The liquid effluent discharged from this is colourless, odourless and confirms to the Pollution Control Board norms.

Polyethylene Septic Tanks

As the name suggests United Polyethylene Septic Tanks are made Of Polyethylene in a single moulding. The unique size and 3 chamber design of United Polyethylene Septic Tanks play a very important role in processing waste. There are manholes provided for convenience. The high wall thickness withstands Load and pressure of the earth to a great extent. Being light in weight, it is easy to transport and in-install. These septic tanks are made in salt resistant, nondegradable plastic, hence they are more suitable in saline areas. All that has to be done for fitting the tank is to fill the tank with water, connect the drain line to the inlet and outlet to the soak pit. Cover the manholes with the lids provided and the tank is ready to use.

Technical Specification (Polyethylene Septic Tank)

No	Models	Type-1A	Type-1B	Type-1	Type-2	Type-3	Type-4 (As per IS code of practice)	Type-5
1	Color (UV Stabilised)	Terracotta	Terracotta/Black	Terracotta/Black	Terracotta/Black	Terracotta/Black	Terracotta/Black	Terracotta /Black
2	Diameter	600 mm	850 mm	850 mm	1000 mm	1000 mm	1300 mm	1600 mm
3	Length	2000 mm	2000 mm	2500 mm	2300 mm	2800 mm	2600 mm	3200 mm
4	Thickness	10 mm	10 mm	10 mm	10 mm	10 mm	16 mm	16 mm
5	No. of Chambers	3	3	3	3	3	3	3
6	No. of Manholes	2	2	2	1	2	2	2
7	Size of Manholes	300 mm (Dia)	300 mm (Dia)	300 mm (Dia)	550 mm (Dia)	550 mm (Dia)	550 mm (Dia)	550 mm (Dia)
8	Dia of inlet & outlet pipe	110 mm	110 mm	110 mm	110 mm	110 mm	160 mm	160 mm
9	Air vent	50 mm	50 mm	50 mm	50 mm	50 mm	50 mm	50 mm

In view of constant research and development, the specifications are subject to change without prior notice.

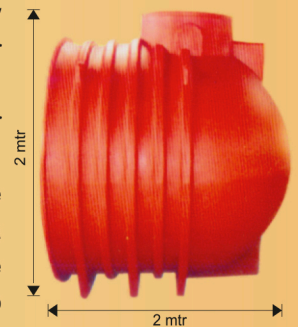
MODULAR UNDERGROUND TANK

TANK

Another feather in our cap is the addition of our new member, modular polyethylene underground tank to our family.

The tank is designed by renowned Italian product designer Mr. Giovanni Murattori.

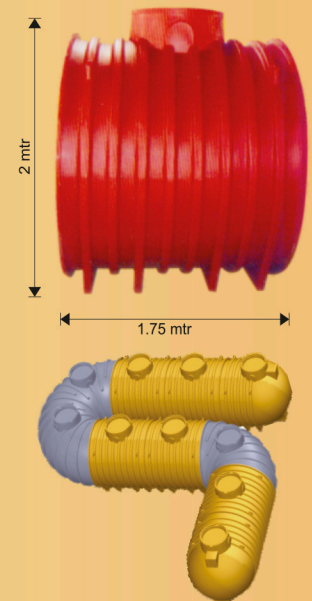
You demand the volume, we have it. These tanks are pre plumbed and modular in design, each module has a capacity of 5000 Ltr. Volume. The tank shape can be modulated to the desired volume and can be shipped to



These tanks are light weight, easy to install, temperature resistant from -35 to +60, cent percent leak proof, smooth interiors, resistant to acids, alkalis and load bearing.

Tanks are provided with additional extension risers, if required to attain the finish level. The lids are double walled for extra safety.

Tanks can be colored as per the choice of clients to meet the color code requirement.



Perforated Pipes & Endcaps Suitable for MANHOLE AND SOAKAWAY RINGS

UNITED Manhole and Soakaway Rings

Manhole chamber rings are manufactured in polyethylene with tongue and groove joints designed to accommodate modular vertical expansion.

Manhole rings can be supplied as plain ring or with perforations

Designers and users should ensure that they have taken into account the current requirements for manhole access as detailed in the Health and Safety Code of Practice, Regulations and Guidance issued by the Health and Safety Executive and other relevant requirements.

Manhole and soakaway depths are nominal, actual depths may vary.

Calculation of Storage Capacity

The effective depth of a soakaway chamber, h , is defined as the depth between the invert level of the lowest pipe entering the chamber and the base of the chamber.

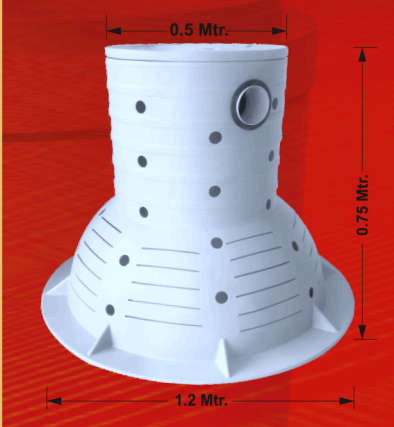
To calculate the required storage capacity BS 8301: 1985 recommends that a rainfall depth of 12 mm be taken over the entire drainage area. The required effective depth of the soakaway can be calculated from the following equation.

$$h = \frac{0.048A}{\pi D^2}$$

where A = Area to be drained (m^2)

D = Soakaway diameter (m)

h = effective depth (m)



Sump Tank

This tank has been designed to reduce buoyancy effect during monsoon, preventing it from floating during dry run of the tank. It is also provided with leakproof threaded lid to avoid infiltration of sub soil water. The tank is designed to withstand external soil pressure.

Vertical Septic Tank

The sump tank is also designed to be used as vertical Septic tank, with additional attachments inside. The tank is coloured in Terracotta colour to match the international colour code for sewage system.

Water Storage Tank

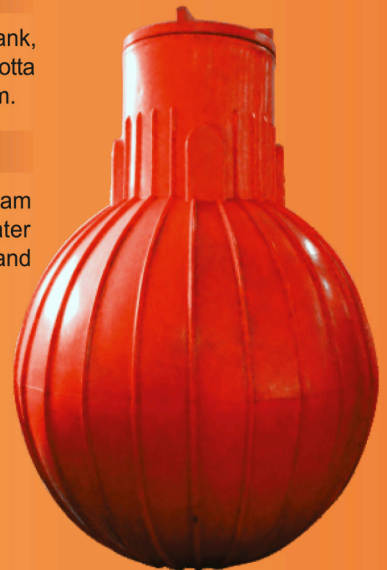
Gone are the days of using black colour water tanks in your dream house. UNITED has launched an aesthetically designed water storagetank that perfectly blends to the design of any house and can be proudly displayed on the roof top.



Sump Tank
Design Reg No : 208309



Water Storage Tank
Design Reg No : 203931



Vertical Septic Tank
Design Reg No : 208310

UNITED

Multi way pipe connector with

MANHOLE INSPECTION CHAMBER



■ Suitable for 160 MM



■ Suitable for 110 MM

UNITED Multi way pipe connector, Manhole or Inspection chamber is an integral part of any drainage system and are the access points into it when it comes to cleaning, clearing and inspection, however the number and construction of any chambers at your property, if any will largely depend on the plumbing plan.

Brick Built Manholes

The time and effort spent on the construction of these chambers in today's terms would be phenomenal, and on the off chance that you could find a modern brick mason happy enough to work in a trench the cost would be prohibitive, for this reason and a few others modern chambers are rarely completely constructed from brickwork unless for rare site specific reasons.



Why Brick Built Chambers Fail

Erosion of the sub-soil beneath the chamber can cause subsidence and the chamber will lean or rotate, this is often compounded by vehicular movement. Water loss can occur due to defective pipe work entering or leaving the chamber, water erosion from a burst water mains or ground water ingress can also affect the chamber base and brickwork.

Tree root ingress is common on brick built chambers usually entering between the manhole and its cover or through the sand and cement benching, however roots can also find their way through the brick work itself if there has been erosion to the pointing or any cracks in the bricks themselves.

UNITED Multiway pipe connector

Preformed plastic manholes make the construction of a domestic chamber very simple, they come in two components the manhole base, and the cover.

Our chamber base comes in a unique form to provide entry of branch pipes in any direction apart from the straight channel running provided in the chamber.

The beauty of these chambers is they are easy to assemble and its easy to achieve a water-tight construction, the components are light in weight.



UNITED

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COMPARISON CHART

Conventional Septic Tank

High construction cost

Cannot be shifted

Not Easy to clean

Durability-Doubtful

Chances of seepage more

Trench is necessary

Require more space

Can be built only on ground

Not suitable for all soil conditions

Corrosive

UNITED Septic Tank

Low cost

Can be shifted

Easy to clean by oneself

Durability Guaranteed

Tested for seepage

No trench required

Can be fitted in small area

Can be kept on any type of floors

Adaptable anywhere

Non-Corrosive

UNITED

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