

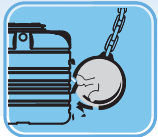
SUPER STRONG WATER TANKS MADE FOR GENERATIONS



UV Protected



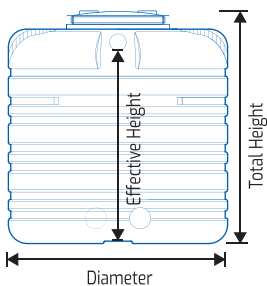
No Algae Growth



Super Strong



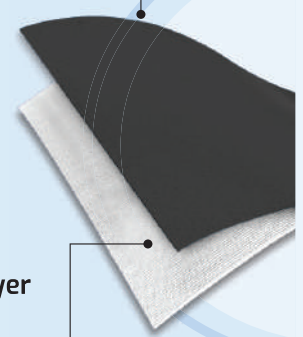
- ▶ Unique shape ensures equal pressure
- ▶ Improved stability
- ▶ Larger diameter against strong winds
- ▶ Highest number of ribs purposely made for maximize the strength
- ▶ Specially designed fittings



| Available size | Available colours | Total Height | Effective Height | Overall Diameter |
|----------------|-------------------|--------------|------------------|------------------|
| 300 L | Black ■ | 980mm | 790mm | 700mm |
| 500 L | Black ■ | 995mm | 800mm | 935mm |
| 1,000 L | Black ■ | 1,255mm | 1,115mm | 1,160mm |
| 2,000 L | Black ■ | 1,750mm | 1,455mm | 1,360mm |

UV Protected Outer Shell

Tough outer shell – impenetrable to falling objects



Inner Hygiene Layer

Inner white color hygiene layer helps to show the water clarity



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TANKS

Core of Hygenic Home!

Why Anton Biocell?

Biocell recycling are safe, compact, reliable, and eco-friendly. It's playing an indispensable role in keeping the environment and ecosystem surrounding high-rise buildings, apartments, hotels, housing schemes, industrial zones, Public Toilet and service centers in coastal, hillside and low-lying areas, clean and healthy.

Biocell Tanks

SF-SEWER TREATMENT TANK



ST-SEPTIC TANK



FT-FILTER TANK



Benefits of the product

Best Solution for marshland and waterlogged lowlands. Great for small plots of land and can be used in both very small and spacious houses. Human waste does not accumulate in soil and can be safely stored. Groundwater is not contaminated. Since the outflow from the tank maintains an optimum COD and BOD level, its environment friendly even if it enters the reservoirs. By coupling the right size of FT and ST tanks system, it can be customized for any population. The best solution to the plague caused by germs released into the environment by toilets and also from floods.

GT-GREASE AND OIL TRAP



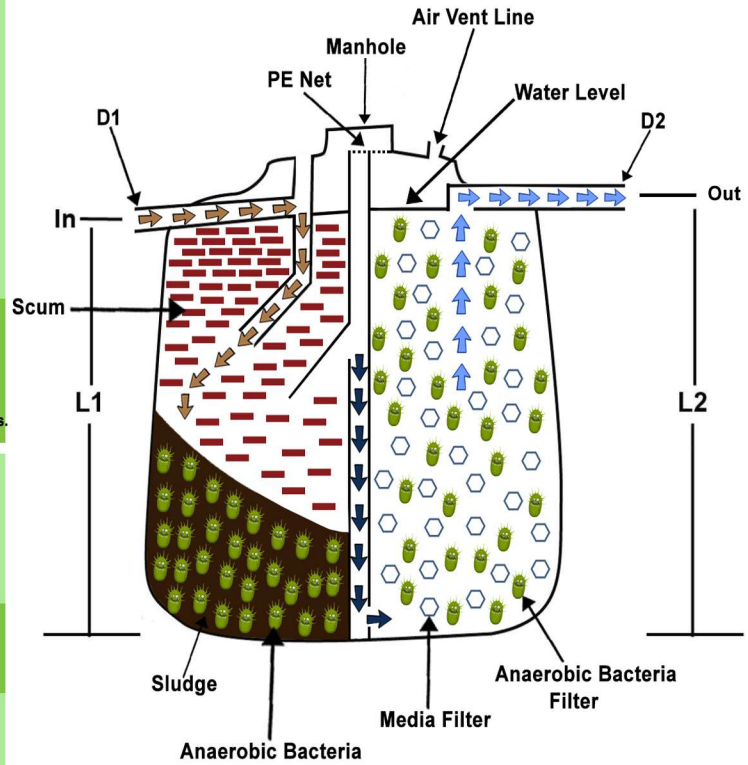
Keeps oil and grease separated from waste water

SUMP TANK



Drinking water can be stored underground, cleanly or safely.

Functional Diagram



| BIO CELL TANK CAPACITY | L1 (MM) | L2 (MM) | D1 (MM) | D2 (MM) | MAN HOLE DIAMETER (MM) |
|------------------------|---------|---------|---------|---------|------------------------|
| 1000L | 820 | 750 | 110 | 63 | 620 |
| 1600L | 1265 | 1200 | 110 | 63 | 620 |
| 1800L | 1460 | 1350 | 110 | 63 | 620 |
| 2000L | 1580 | 1470 | 110 | 63 | 620 |
| 3000L | 1490 | 1400 | 110 | 110 | 620 |
| 4000L | 1870 | 1780 | 110 | 110 | 620 |
| 6000L | 2370 | 2280 | 110 | 110 | 620 |

Recommended Rated Capacities for Biocell Tanks

| Model | Volume of tank (L) | Dimension | | Number of user for 5 years |
|-------|--------------------|--------------|---------------|----------------------------|
| | | Heights (mm) | Diameter (mm) | |
| SF 16 | 1600 | 1490 | 1430 | 4 |
| SF 18 | 1800 | 1680 | 1475 | 5 |
| SF 20 | 2000 | 1830 | 1475 | 6 |
| SF 30 | 3000 | 1720 | 2100 | 10 |
| SF 40 | 4000 | 2100 | 2100 | 14 |
| SF 60 | 6000 | 2600 | 2100 | 18 |

| | | | | |
|-------|------|------|------|----|
| FT 16 | 1600 | 1490 | 1430 | 18 |
| FT 18 | 1800 | 1680 | 1475 | 22 |
| FT 20 | 2000 | 1830 | 1475 | 25 |
| FT 30 | 3000 | 1720 | 2100 | 41 |
| FT 40 | 4000 | 2100 | 2100 | 57 |
| FT 60 | 6000 | 2600 | 2100 | 78 |

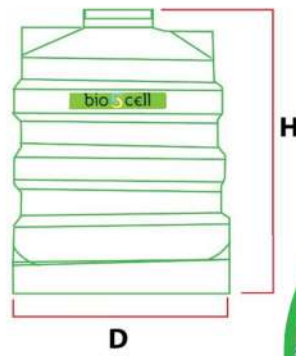
| | | | | |
|-------|------|------|------|----|
| ST 16 | 1600 | 1490 | 1430 | 6 |
| ST 18 | 1800 | 1680 | 1475 | 7 |
| ST 20 | 2000 | 1830 | 1475 | 8 |
| ST 30 | 3000 | 1720 | 2100 | 12 |
| ST 40 | 4000 | 2100 | 2100 | 20 |
| ST 60 | 6000 | 2600 | 2100 | 26 |

| | | | |
|-------|------|------|------|
| GT 16 | 1600 | 1490 | 1430 |
| GT 18 | 1800 | 1680 | 1475 |
| GT 20 | 2000 | 1830 | 1475 |
| GT 30 | 3000 | 1720 | 2100 |
| GT 40 | 4000 | 2100 | 2100 |
| GT 60 | 6000 | 2600 | 2100 |

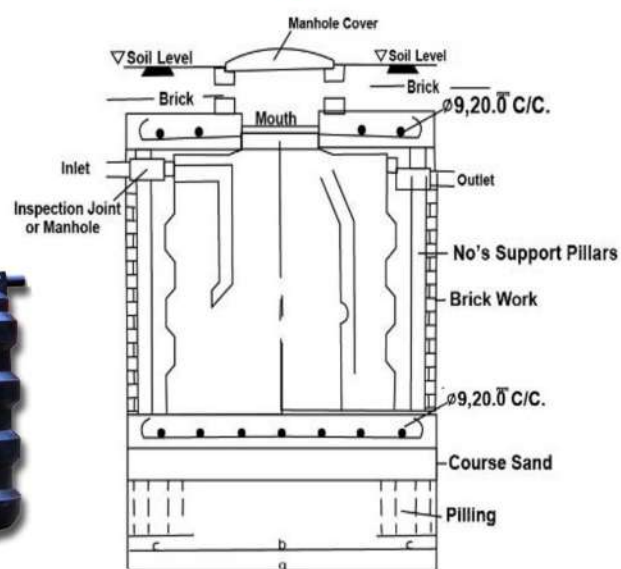
| | | | |
|--------------|------|------|------|
| SUMP TANK 16 | 1600 | 1490 | 1430 |
| SUMP TANK 18 | 1800 | 1680 | 1475 |
| SUMP TANK 20 | 2000 | 1830 | 1475 |
| SUMP TANK 30 | 3000 | 1720 | 2100 |
| SUMP TANK 40 | 4000 | 2100 | 2100 |
| SUMP TANK 60 | 6000 | 2600 | 2100 |

Special Note :

By Coupling the right size of FT and ST tanks system, it can be customized for any population.



Installation Diagram



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WATER STORAGE TANKS AND BIO-CELL SEWER TREATMENT TANKS

DOLPHIN WATER TANKS FOR STORAGE & TRANSPORTATION OF POTABLE WATER STORAGE TANKS



fig. 1



fig. 2

DOLPHIN WATER TANKS

Table 1

| Capacity (Litre) | Model | H - Height (mm) | D – Diameter (mm) | Fig. | Colour |
|------------------|--------|-----------------|-------------------|------|--------|
| 5000 | GW 50 | 1950 | 2120 | 12.1 | BLACK |
| | | 1995 | 2022 | 12.1 | BLACK |
| 10000 | GW 100 | 2860 | 2290 | 12.1 | BLACK |

ANTON MAX POTABLE WATER STORAGE TANKS

MAX WATER TANKS

Table 2

| Capacity (Litre) | Layers | H - Height (mm) | D – Diameter (mm) | Fig. | Colour |
|------------------|--------|-----------------|-------------------|------|---------------------------|
| 300 | Double | 969 | 669 | 12.2 | Black/White |
| 500 | Double | 969 | 925 | 12.2 | Black/White |
| | Triple | | | | Blue or Ivory/Black/White |
| 1000 | Double | 1233 | 1156 | 12.2 | Black/Black |
| | Triple | | | | Blue or Ivory/Black/White |
| 2000 | Double | 1733 | 1360 | 12.2 | Black/Black |
| | Triple | | | | Blue or Ivory/Black/White |

ADVANTAGES OF DOLPHIN AND DOLPHIN MAX TANKS

- * Tank walls do not allow permeation of Oxygen avoiding fungus growth
- * Moulded lid Made with virgin materials
- * Specially designed inlet/outlet threaded nuts
- * ESCR is high, as material is processed to avoid damaging the molecular structures.
- * FDA approved material is used for Storing water
- * Tanks designed with ribs to withstand higher and internal pressure

SPECIAL FEATURES OF THE ANTON MAX TANKS

THREE LAYER PROTECTION

- Strongest** - The 3 combined layers of HM HDPE/HDPE make ANTON MAX Triple the strongest water tank in the market (fig. 3)
- Most Hygienic** - Triple layer protection against algae growth keeps you healthy. The inner and outer layers made of 100% FDA approved virgin raw materials, ensuring non-contamination.
- Attractive appearance** - The aesthetically pleasing colour options add beauty to your home, allowing you to choose a colour, matching your home exterior,

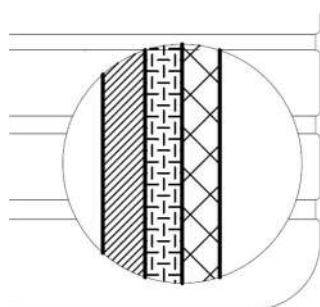


fig. 3

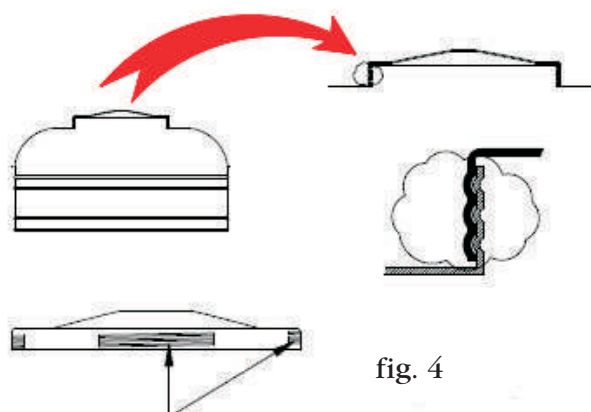


fig. 4

Partially Threaded lid

OUTER LAYER

Made of an advanced raw material HM HDPE which forms a tough outer shell that's impenetrable to falling objects. Available in two specially designed colours - Sky blue and Ivory - that absorb less heat than black

Heat Absorption

Black - 97%

Sky blue - 50%

Ivory - 25%

MIDDLE LAYER

Black in colour (Fig.5) with protection against UV rays. Acts as a secondary barrier against oxygen permeation and avoids algae growth. This retains the water quality same as the source.

INNER LAYER

Made of virgin raw material. Its white colour, helps to show the water clarity.

THREADED LID

The specially designed screw type lid dose not easily removed (fig 4)

GUIDELINES FOR PROPER INSTALLATION AND MAINTENANCE

- a) Place tank on smooth flat surface.
- b) Lift tank after draining water
- c) Do not drop tank
- d) Install fittings that are supplied with tank by ANTON
- e) Ensure that washers are properly placed.
- f) Tanks can be installed on levelled compacted sand or cement slab. Ensure soft surfaces are compacted very firm.
- g) Ensure the surface is completely clear of stones or branches or any other protrusions, as these will pierce through the base of tank
- h) All tank installation must be positioned in accordance with requirements given in warranty card.
- i) The tank's inlet & outlet pipes should be firmly mounted, not allowing to move, providing adequate allowance for expansion/contraction.
- j) Tank site must be at least the same size as the footprint of tank. Tank site must be of sufficient thickness and suitably reinforced to support the tanks and water weight when full.
- k) Additional holes (inlet/outlet/washout/overflow) or increasing existing hole diameter is not recommended as it would cause tank failure. The inlet/overflow is 32mm, outlet/washout is 50mm.
- l) Do not use welds but use regular plumbing.
- m) Tank should not be subjected to any additional load.
- n) Handle with care, avoid deep scratches, or bruises from rolling.
- o) If exposed to Toxic fumes for long periods the tank lifetime will be reduced.
- p) Tank is meant to carry water only.
- q) Keep tank lid closed after installation.

TANK SLABS

Table 3

| | Tank size (Litre) | Slab thickness (inches) | Reinforcement bar size (mm) | Centre to centre distance (cm) |
|---|----------------------|----------------------------|--------------------------------|-----------------------------------|
| 1 | 300 | 3.5 | 10 and 6 | 14 |
| 2 | 500 | 3.5 | 10 and 6 | 14 |
| 3 | 1000 | 4.0 | 10 and 10 | 14 |
| 4 | 2000 | 4.0 | 12 and 10 | 14 |
| 5 | 5000 | 6.0 | 16 and 12 | 14 |
| 6 | 10000 | 15.0 | 25 and 16 | 14 |

* Proper soil test should be done before following Table No. 3

BIO -CELL SEWER TREATMENT TANK

Septic holding tank-SHT

Grease and Oil trap-GT

Filter tank - FT

Sewer treatment tank SF

Recommended Rated capacities for Bio-cell tanks

Table 4

| Model No | Volume of Tank (Ltr) | Height h (mm) | Diameter D (mm) | Number of users for Five years (Black Water of Houses) |
|----------|----------------------|---------------|-----------------|--|
| SF 16 | 1600 | 1490 | 1430 | 4 |
| SF 18 | 1800 | 1680 | 1475 | 5 |
| SF 20 | 2000 | 1830 | 1475 | 6 |
| SF 30 | 3000 | 1720 | 2100 | 10 |
| SF 40 | 4000 | 2100 | 2100 | 14 |
| SF 60 | 6000 | 2600 | 2100 | 18 |
| SHT 16 | 1600 | 1490 | 1430 | 6 |
| SHT 18 | 1800 | 1680 | 1475 | 7 |
| SHT 20 | 2000 | 1830 | 1475 | 8 |
| SHT 30 | 3000 | 1720 | 2100 | 12 |
| SHT 40 | 4000 | 2100 | 2100 | 20 |
| SHT 60 | 6000 | 2600 | 2100 | 26 |
| FT 16 | 1600 | 1490 | 1430 | 18 |
| FT 18 | 1800 | 1680 | 1475 | 22 |
| FT 20 | 2000 | 1830 | 1475 | 25 |
| FT 30 | 3000 | 1720 | 2100 | 41 |
| FT 40 | 4000 | 2100 | 2100 | 57 |
| FT 60 | 6000 | 2600 | 2100 | 78 |
| GT 16 | 1600 | 1490 | 1430 | |
| GT 18 | 1800 | 1680 | 1475 | |
| GT 20 | 2000 | 1830 | 1475 | |
| GT 30 | 3000 | 1720 | 2100 | |
| GT 40 | 4000 | 2100 | 2100 | |
| GT 60 | 6000 | 2600 | 2100 | |



fig. 5

Note : Volume of tank = Effective Volume

BIO-CELL INSTALLATION LAYOUT

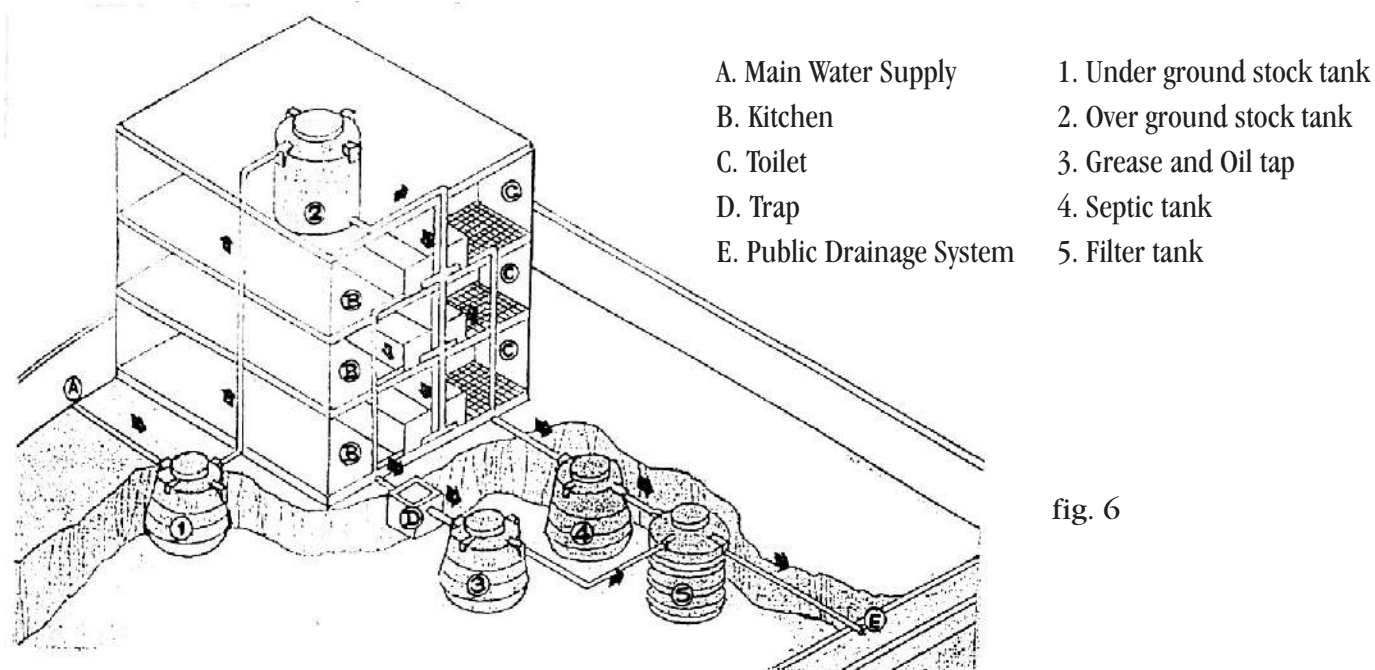


fig. 6

SEWER TREATMENT TANK

Sri Lanka's total no of households is around 4.5 million, 4% of these households are connected to central sewer treatment facilities. Balance depends on on-site disposal, or sewer is diverted to drains, ditches & canals. Most, septic systems fail, due to:

- a) Urban congestion
- b) High groundwater table/Poor soil
- c) Inappropriate design
- d) Poor maintenance

Treatment tanks that fail would contaminate groundwater, leading to waterborne disease outbreaks & other adverse health effects. The bacteria, protozoa & viruses found in sanitary wastewater can cause disease, including gastrointestinal illness, cholera, hepatitis A & typhoid.

Nitrogen from urine, feces, food waste & cleaning compound are present in wastewater. Consumption of nitrates can cause methemoglobinemia.

Bio-cell tanks are pre-fabricate sewer treatment tanks.

Advantages

- * The outlet of the tank can be connected to the Public Drainage System
- * Unique filtration system purifies the outlet water greatly.
- * Could be installed closer to the house Well as there is no seepage of water to the surrounding soil.
- * Less labour cost and short time to install
- * Roots of nearby trees cannot be penetrated to the tank since bio-cell tanks are 100% Leakproof.
- * A soakage pit is not necessarily required therefore less area is required.

SEWER TREATMENT TANK MODELS

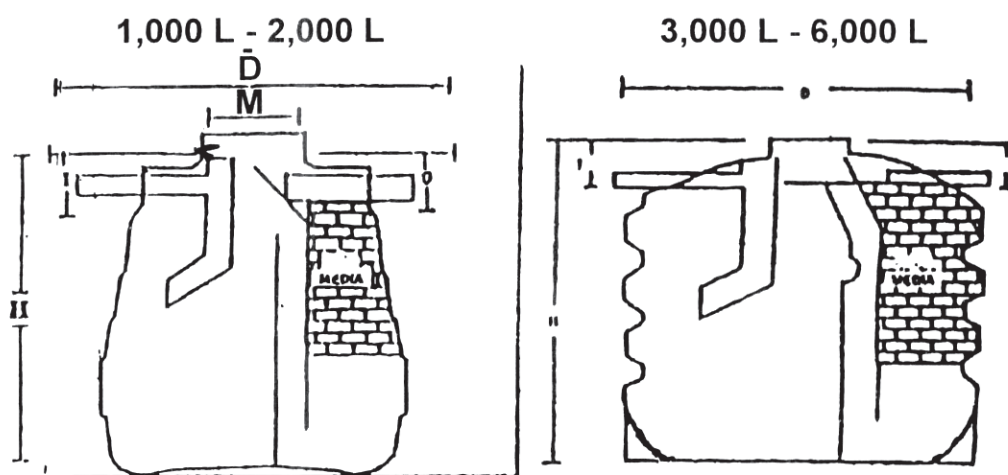


fig. 7

fig. 8

INSTALLATION OF SEWER TREATMENT TANK

- The inlet of the tank is 110mm. The outlet is 63mm for 1000 to 2000 l and the outlet is 110mm for 3000-6000 l.
- Concrete base should be constructed to support the tank.
- Additional Piling could be required if the tank is to be installed in soft soil or in filled lands.
- Concrete cover is to be constructed to protect the tank, in case the area is dug using a sharp object.
- Brick lining around the lid & manhole cover to be built to prevent entering soil to the tank.
when the lid is open.
- The inlet of the tank should be connected to the domestic sewer discharge line & the outlet of the tank can be connected to the Public Drainage Line.

- **Vent Hole:** the threaded hole in the tank is the Vent hole. The top of the Vent line should be covered with Mosquito proof wire mesh. The height of the pipe should be 600 mm above the highest vent opening of the building to prevent smell. Alternatively the Vent line of tank can be connected to the house vent line.
- **Manhole Cover:** A steel lid with a water tight seal is ideal, however, a concrete cover may be used as long as it is water tight. Area of cover should be larger than the area of tank lid. This is not provided with the tank.

INSTALLATION DIAGRAM

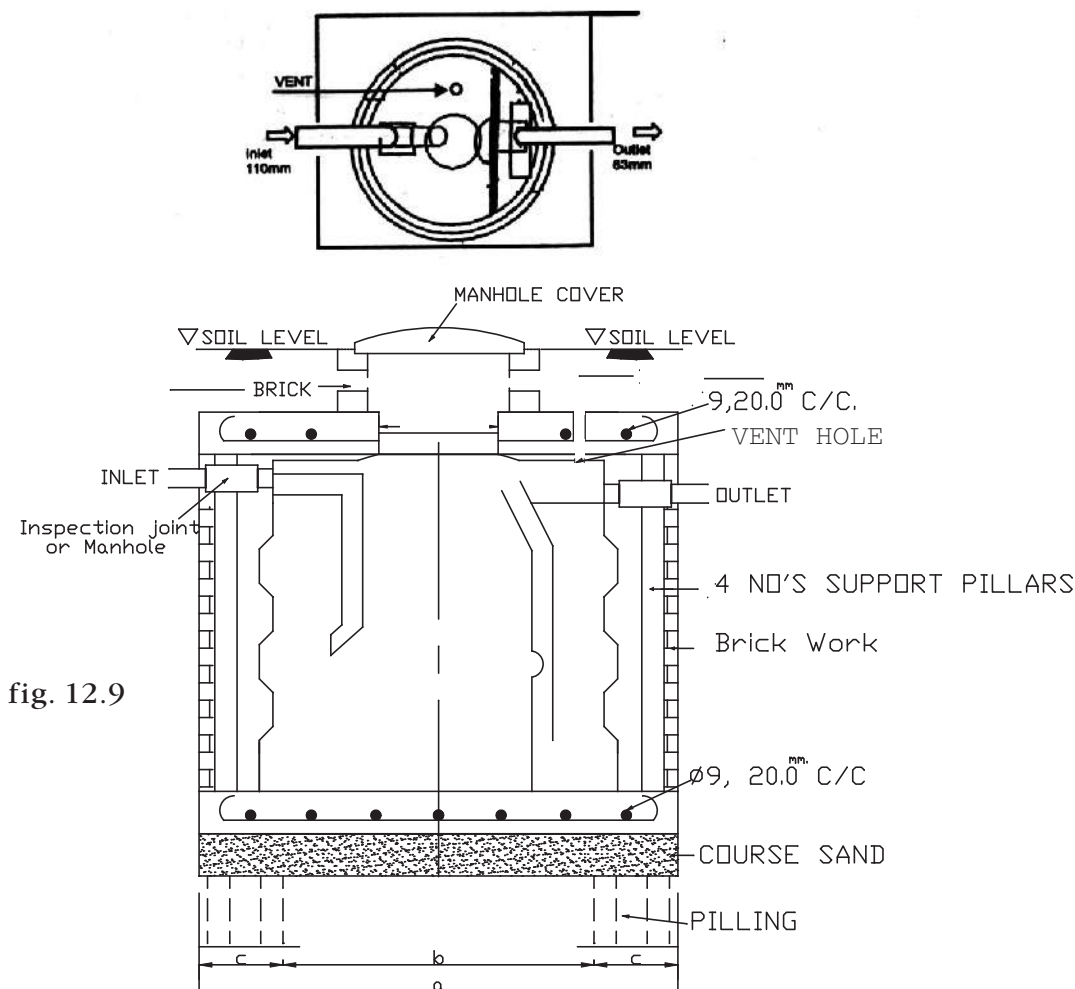


Table 5

| Volume of Tank | Pile Number | Type (m) | Dimension of Concrete Base (m) | Dimension (m) | | |
|----------------|-------------|--------------------|--------------------------------|---------------|------|------|
| | | | | a | b | c |
| 1000 | 4 | 0.15 x 0.15 x 2.50 | 1.40 x 1.40 | 1.40 | 0.80 | 0.30 |
| 1600 | 4 | 0.15 x 0.15 x 3.00 | 1.60 x 1.60 | 1.60 | 1.00 | 0.30 |
| 1800 | 4 | 0.15 x 0.15 x 3.50 | 1.60 x 1.60 | 1.60 | 1.00 | 0.30 |
| 2000 | 4 | 0.15 x 0.15 x 4.00 | 1.60 x 1.60 | 1.60 | 1.00 | 0.30 |
| 3000 | 4 | 0.15 x 0.15 x 4.50 | 1.80 x 1.80 | 1.80 | 1.20 | 0.30 |
| 4000 | 6 | 0.15 x 0.15 x 3.00 | 2.10 x 2.10 | 2.10 | 0.75 | 0.30 |
| 6000 | 6 | 0.15 x 0.15 x 4.00 | 2.30 x 2.30 | 2.30 | 0.85 | 0.30 |

DIMENSIONS OF CONCRETE BASE

Table 6

| Capacity of Tank (l) | Dimensions of Concrete Base (mxm) |
|----------------------|-----------------------------------|
| 1000 | 1.4 x 1.4 |
| 1600 | 1.6 x 1.6 |
| 1800 | 1.6 x 1.6 |
| 2000 | 1.6 x 1.6 |
| 3000 | 1.8 x 1.8 |
| 4000 | 2.1 x 2.1 |
| 6000 | 2.3 x 2.3 |

WARNING:

- * Grease & Oil should not be discharged into Septic Filter Tanks.
- * Kitchen waste water lines should not be connected through the Septic-Filter Tanks.
- * The pipes should be laid in straight lines in both horizontal & vertical planes as far as possible. If bends are unavoidable, they should be of long radius with cleaning eye.
- * The outlet pipe should be above the public drain level. It is necessary to maintain an inclination from the house to inlet as well as outlet to drain to ensure proper functioning of tank.

SEWER TREATMENT TANK INSTALLATION LAYOUT

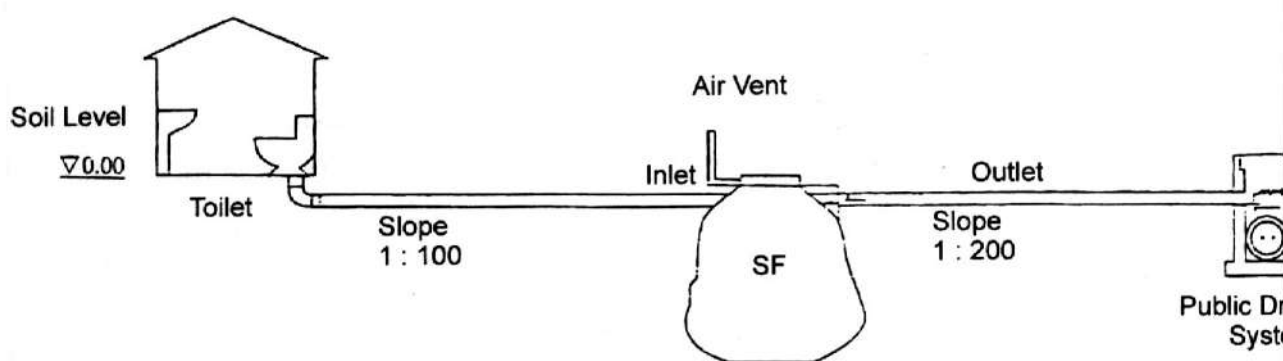


fig. 10

CLEANING:

To check the level of solid in bio-cell tank use a long rigid stick. Insert into the side where the solids get collected. If 1/3 of the height of the septic tank is filled with solids, should be removed with the assistance of the Gully Sucker could be arranged by the respective Local Council