

QUICK INSTALLATION GUIDE

Installation Guidance Notes – Below ground Tanks

General

1. These guidance notes refer only to the installation of ‘easySTP’ Sewage Treatment Plant for above ground installation.
2. These guidance notes do not provide specific, site-related installation instructions.
3. If in any doubt about any aspect of the installation please contact the Indus service team on 850-100-6000.

Transportation, unloading and storage of tanks

1. Tanks must be held down during transportation using nylon straps, do not use chains, cables or wire ropes.
2. Do not over tighten straps, causing deformation of the tank shell.
3. Tanks are best lifted by a crane utilising webbing lifting straps – do not use chains, cables or wire ropes in contact with the tank.
4. It is recommended that a lifting beam is used for tanks longer than 8 meters.
5. Smaller tanks may be lifted with other suitable site equipment, but greater care is needed to control the lift and to ensure the tank is not damaged.
6. Not all tanks will have their centre of gravity at the centre of the tank. Therefore, the lifting straps need to be arranged to ensure the tank is stable during lifting.
7. Move tanks only by lifting and setting, do not drag or roll.
8. Do not drop or roll tanks from the delivery vehicle.
9. Place tanks carefully onto a smooth level even surface, free from rocks, large stones or other debris that could cause point loads on the tank shell.
10. Chock tanks using tyres, sandbags or similar to prevent rolling.
11. In high wind conditions, consideration should be given to strapping down the tanks to prevent damage.

Pre-Installation Inspection

1. Tanks should be subject to a visual inspection prior to installation. Special consideration should be given to strap positions. Check for: fractures to the shell or ribs; delaminations; scratches or abrasions deeper than 1.5mm; stress cracks or star crazing.
2. Any damage should be notified to the delivery driver and to Indus sales or service team.
3. Do not undertake any un-authorized repairs, as this will invalidate the tank warranty.
4. Where present, all fixings (nuts, bolts, screw fixings etc) should be checked and retightened to correct any movement during transport. ‘Indus’ do not accept responsibility for fixings that have not been checked prior to the tank entering service.

Site Preparation / civil works required for the easySTP- Above Ground Installation

Client has to arrange for the following civil works for installation of easySTP above ground.

- 1 Bar Screen Chamber
- 2 Collection cum equalization chamber (minimum 35% of STP capacity)
- 3 Treated water tank (if treated water has to be stored)
- 4 Concrete platform is suitable for placing the STP. easySTP has to be placed on a concrete level platform located next to the collection cum equalization tank.
- 5 Provide for air vent pipes in the collection tank. Provide for manholes to the collection tank.
- 6 Provide for suitable power (electrical) connection with an isolator and proper earth close to the STP location.
- 7 Plan for pipelines for discharging treated water

Precautions for site selection

1. Usually sewage pipelines are laid such that it flows by gravity towards the slope. All pipelines will be terminated into a collection tank. It is a common practice to have a collection tank below ground level. Collection tanks may be open to the sky or closed with RCC. If it is open to the sky, the same may be covered with a grill to ensure that animals / people do not fall into the tank by accident.
2. Since it may be located in a sloped area, rain water may flood this area during rains. To prevent rain water from getting into the STP, the STP platform has to be constructed at such height that rain water does not enter into the STP under any circumstances.
3. If rain water floods the STP, the control panel and pumps will be submerged and may burn out. The customer has to get them repaired at his cost and time.
4. It is very essential to have the STP location such that accumulated rain water flows out and doesn't stagnate in the area.
5. Ensure that even treated water doesn't stagnate in the STP locality.
6. Ensure that sufficient head room is available on the platform. Clear height of 3.5 meters is required.

Plan ahead for treated water discharge

- While selecting the location of the STP, plan for the discharge of treated water.
- Check out the soil conditions in your area. Also check your environmental regulator's directions on how to discharge / re-use treated water.
- With properly sized and normally working STP, treated water will be suitable irrigation and gardening.
- Check out the water quality before using it for toilet flushing.

Site Preparation / civil works required for the easySTP- Gravity Flow

Client has to arrange for the following civil works for installation of easySTP if sewage can flow directly into the easySTP inlet.

Bar Screen Chamber

1. Treated water tank (if treated water has to be stored)
2. Concrete platform of suitable for placing the STP. easySTP has to be placed on a concrete level platform located next to the collection cum equalization tank.
3. Provide for suitable power (electrical) connection with an isolator and proper earth close to the STP location.
4. Plan for pipelines for discharging treated water