



Tuberia

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Tank installation
manual

Polyethylene Pipe and Tank Manufacture

Polyethylene tanks could be installed and utilized in three different manners:

1. Underground
2. On ground
3. High attitude from ground

In order to have safe and correct operation of polyethylene tanks for these three installation manners, there are standard principles which should be applied carefully. This installation instruction has been written based of universal standards and also companies own experiences in different project implementation. Therefore precise application of this instruction will be warranted the desired performance of the polyethylene tanks, which are produced by this company.

Underground Installation

In order to have larger available space, usually the polyethylene tanks are installed underground. The underground installation process will be done in four steps:

Excavation of location

The preparation of digged location before installation of the tank is the most important part of the underground installation process.

1. The dimensions of excavated location should be at least one meter larger than the dimensions of tank in all directions.
2. In order to avoid any dangerous situation for workers, it is advised that the location is excavated by inclined walls.
3. The digged soils must be put at least 5 meters away from excavated location to avoid any falling.
4. Clean the digged floor from any stones and hard objects with more than 20 cm diameter. If the ground soil is not enough firm, compact it at least 95%.

5. Then the digged floor should be leveled by reinforced concert. Please note that the slope for inlet and outlet of tanks has been implemented during production. The thickness of the concrete is proportional to soil resistance. However at least 15-20 cm concert thickness is advised.
6. After 48 hours the foundation is ready to install the tank.

Thanks Movement

The produced tanks in the factory are loaded and delivered to customers correctly. Therefore it is necessary to consider these principles during the unloading and movement of the tanks to excavated location, in order to avoid any serious damage to tank.

1. Use the hooks on the top of the tanks to elevate the tanks by crane.
2. The tanks should be kept balanced during the unloading and movement process.
3. Place the tank on the ground slowly to avoid and damage to stands.

Connecting outlets and inlets of the tank

After placing the tank on the ground all inlet and outlet pipes could be connected to the tanks. Please note any soil or external objects should not insert to pipes or inside the tank. Also it is better to bury the pipes by allowed materials (refer to next section) gradually in order not to damage them.

Burial of the tank

Now it is necessary to fill under and spaces around the tank with materials like gravel and sand. The diameter of these materials should not exceed from

15-20 mm. Note that the construction or asphalt waste and gravel with sharp edges must not be used in this step at all.

1. Pour these materials around the tanks by hand. Avoid using any mechanical instrument as a loader to unload the materials directly on the tank.
2. Pour the materials with 30 cm thickness around the tank, and then compact each layer to 95% of standard level. Please note that under the tanks should be filled completely with materials.
3. Continue filling and compacting with allowed materials to reach 30 cm height above the tank.
4. Now the rest of the filling process could be continued by using the digged soils of the location.
5. Heavy vehicles like trucks or tractors should not move on the buried tank location.
6. If heavy vehicle traffic exists on the installed tank location, the tanks should be preserved by concrete walls and roof.
7. The manholes of the tanks should be supported by concrete or brick wall until the ground level. It is possible to order the desired height for manholes to install on the tanks.

Ground installation

1. The ground should be leveled (zero slope) by reinforced concrete before tank installation.
2. Around the tanks should be free from any external obstacles like walls. The tanks should be installed at least 30 cm away from walls.
3. In order to have long life time for polyethylene tanks, it is necessary to protect them from direct sun light radiation.