Fig.1

Fig.2

Fig.3

Fig.4

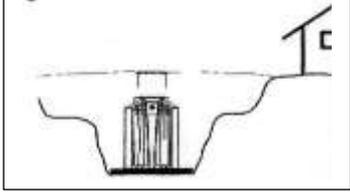
Fig.6

Short installation guide
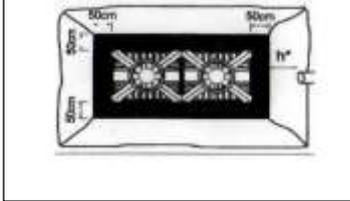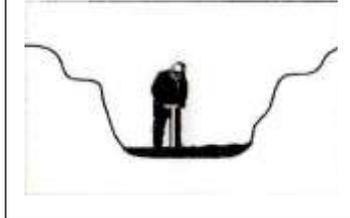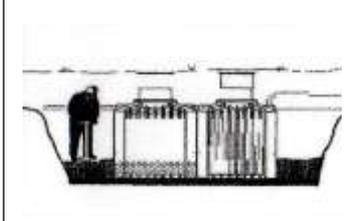
With construction of excavation safety has to be considered (regional restrictions). Do not install excavation for plastic container in depression of the terrain. When installing container an area that is endangered to risk of floating or stagnant moisture or in areas with high ground water level or areas with cohesive or impermeable ground the risk of aquaplaning and deforming of the empty tank has to be determined. (see chapter 2.3 special installation conditions in owner manual). If necessary an adequate drainage line has to end to dimension in a vertical installed hopper to dewater. A submerged pump has to be in the hopper to pump down the surplus of water). Pump has to be checked regularly! Water can also be drained off to a deeper location to be drained away in gravity or to be diverted to a drainage.

When installing plastic container in terrain with hillside situation it is to be considered that edgewise pushing earth pressure with not naturally grown earth should be absorbed with a supporting wall. Surrounding of container should always be able to be percolated through. Excavation should be planned near to direct house connection with enough distance to the building (Fig.1). This, however, is due to the building class, depth of building and the depth of the angle of repose. Measurements of tank +25 cm in each direction are the size of the excavation (Fig.2).

When difficult ground conditions are encountered expected:

For example the soil-material under or around the tank cannot be compressed or it is not stable/fixed, or shrinking clay etc…, when water can appear around the tank (groundwater, water in soil-layers, rainwater which cannot percolate etc…) there can come a big force on the tank walls. In this cases put concrete under and around the tank! (Carefully place concrete around the tank in 150 mm thick layers, ensuring that there are no voids remaining around the tank, and the level of water inside is maintained at a level of approx.450mm higher than the level of concrete backfill).

Depth of excavation is calculated out of inflow level of container (150cm) + 15cm bed (same material as filling material mentioned later on), and compressed by hand (Fig.3). Plastic container is to be installed in excavation (Fig.4). Connect the tanks with the "kit pipe delivery in the filter). Tank (just the prechamber, Attention the filter should not be put in water!) has to be filled with water now til 30cm water level in tank. Afterwards please fill excavation with back-filling materiel (app 15cm) (see chapter 2.2.4 in owner manual) and compress with hand (Fig.5). Repeat this action and fill in ca 15-20cm of water and fill excavation up to water level with filling material. Repeat until tank is completely covered. Please pay attention on the right position of the stainless steal profiles (for reinforcement) in the tank. The tank should be erratic deformed. Especially recommendable as back-filling material is gravel or gravel-sand beddings with a friction angle ≈32,5 – 37,5° in compressed state. In order to avoid pushing water or backwater, filling material right behind the back of the container has to permeable to water, so surface and stratum water can trickle away. It has to be made sure that container is embedded equally from all sides. The rest of the excavation can now be filled. Soli, earlier removed from excavation can be used (no stone near to container wall). Compress only by hand! Surface of excavation should be created so that no water can be gathered but be percolated through the earth.

Install the high ventilation from the "T" between the last prechamber and the filter (see chapter 7.7 the drawing for the ventilation). Install also the low ventilation of the filter (this pipe is delivery in the prechamber tank because of its length), adjust its length and put the cap (it's delivery in the filter). (see chapter 2.7.3 in the owner manual).

Don't forget to close the covers!