Bigger retaining tank for the Ekolet Happy-Loo toilet

If the toilet is in heavy use (e.g. a big family or public use), the liquid bucket should be replaced with a bigger retaining tank and especially in the situation if the liquid is being absorbed to the ground from the retaining tank.

Most of the liquid in the Ekolet Happy-Loo toilet will evaporate with the air flow and rest will drop to a liquid collector bowl. The liquid waste coming out from the liquid pipe should be retained for at least 10 days before it can be absorbed into the ground. This can be done by installing a large enough tank (e.g. 80 litres tank) into the ground and circulating the liquid via the tank. This enables the liquid particle to retain long enough so that harmful microbes die and decrease so much that they no longer harm the environment and health and can be absorbed to the ground from the outlet of the tank. It is important that there are plants around the outlet since roots of plants and trees are very effective nutrient eliminators.

Installation of the retaining tank
1. Dig a hole into the ground which is much larger than the retaining tank.
2. Install the inlet and outlet pipes as shown in the figure below so that the liquid is forced to circulate through the bottom part of the tank before it gets out from the outlet pipe which has 90° angle. There must be a watertight seal between the outlet pipe and the tank to prevent the liquid to leak out from the joint incorrectly.
3. Install the retaining tank into the hole and fill rest of the hole with a water-permeable material such as sand, gravel or small stones. This way the liquid gets easily absorbed into the ground for the nearby plants and trees.

Fill the empty tank half with water after the installation if the ground water level is high in the area. This way the retaining tank will not pop up from the ground in case the ground water level rises.

![Diagram of the retaining tank installation](image-url)
Installation of bigger retaining tank for ONE Happy-Loo toilet

Top view

Side view

Fill the empty tank half with water after the installation if the ground water level is high in the area. This way the retaining tank will not pop up from the ground in case the ground water level rises.
Installation of bigger retaining tanks for TWO Happy-Loo toilets

Fill the empty tanks half with water after the installation if the ground water level is high in the area. This way the retaining tank will not pop up from the ground in case the ground water level rises.