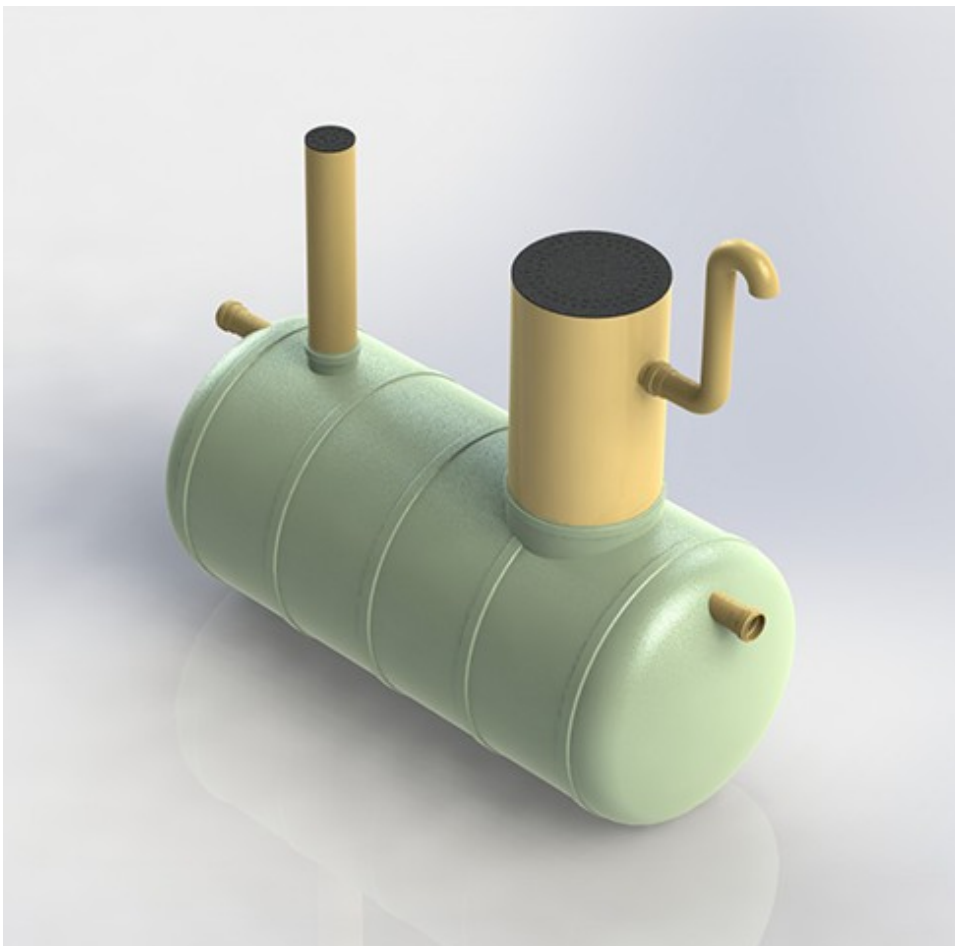




Installation and service manual for grease traps



EN-1825

Klaasplast OÜ

Kose County,

Kolu Village, Kuke Farm

Phone: (+372) 5373 7616

E-mail: info@mahuti.ee

www.mahuti.ee

1 GENERAL INFORMATION

This manual contains installation instructions for fiberglass grease traps and corresponds to the standard EN 976-2.

Klaasplast OÜ assumes no liability for mechanical damage caused to the trap during delivery or assembly, or for material loss, which has occurred due to neglecting installation instructions.

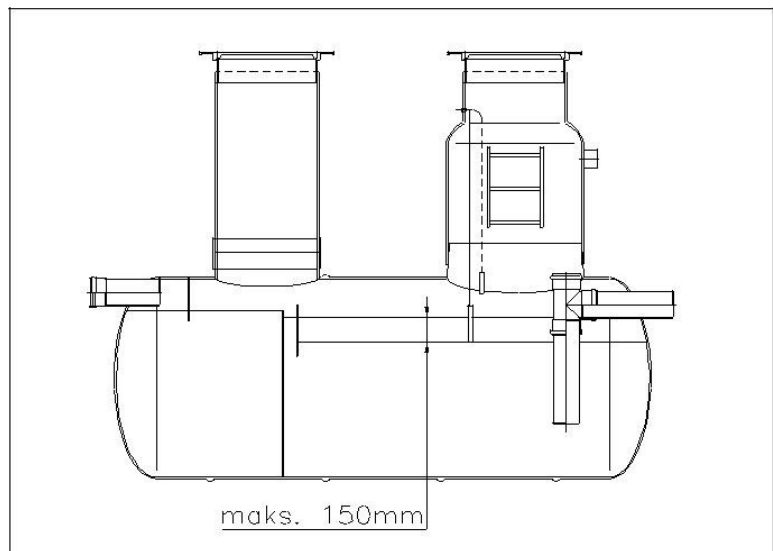
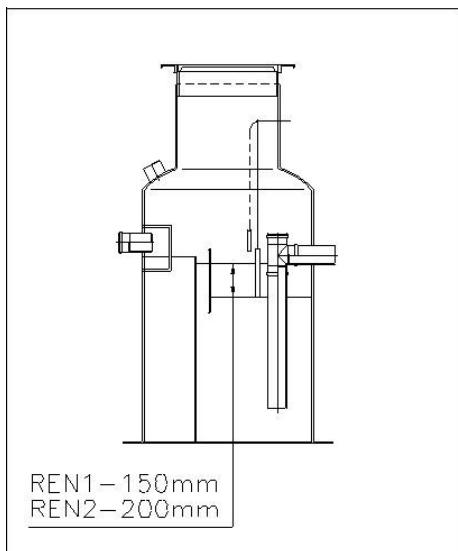
2 INSTALLATION OF GREASE-LAYER LEVEL CONTROL DEVICE

When predetermined grease layer thickness is surpassed, the control device informs user by visual and acoustic signal (filling alarm).

In case it is necessary to extend the cable that is enclosed with the sensors, a two-groove 1.5 mm² cable with maximum length of 200 m should be used.

The filling level sensor should be installed into the grease trap, so that its lower end would not be deeper than 150 mm below constant water level (200 mm in case of REN 2).

When installing the fill level sensor, the sensor's lower end must be at the same level with the upper edge.



Control device signals:

- Green LEDs are lit in control block – neither of the sensors is under alarm;
- Filling level sensor is red and acoustic alarm is on – the sensor's end is inside grease layer or air;
- Overfilling level sensor is red and acoustic alarm is on – the sensor's end is inside grease layer or water;

Push the button “RESET” to silence the buzzer, buzzer sound is enabled again after approximately 20 hours.

NB! Before removing the front panel of the control block, power source must be turned off!
You can find detailed installation and usage manual inside the control device packaging.

3 INSTALLATION INSTRUCTIONS

3.1 ANCHORING THE GREASE TRAP

The purpose of anchoring is to ensure that the trap stays in fixed position and to prevent its rise to the surface of water due to upward pushing force.

It is the task for the trap's owner or the representative of the installation company to decide, whether there is a need to anchor the grease trap. When making the decision, all potential factors that could cause the trap to rise to the surface must be taken into account (level of groundwater, drainage of rainwater, accidental floods, unstable soil surface, etc.). The trap tends to rise to the surface primarily while being emptied; during the rest of the time it is filled with water.

The most common anchoring methods are:

- On site cast or pre-cast reinforced concrete bottom plate that is placed under the trap;
- Reinforced concrete blocks that are placed at the sides of the trap.

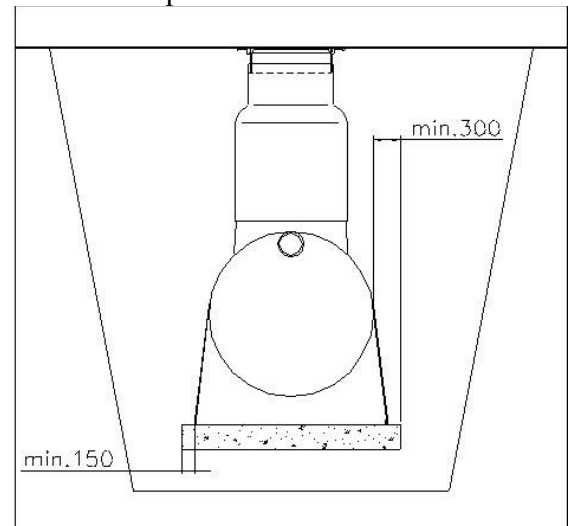
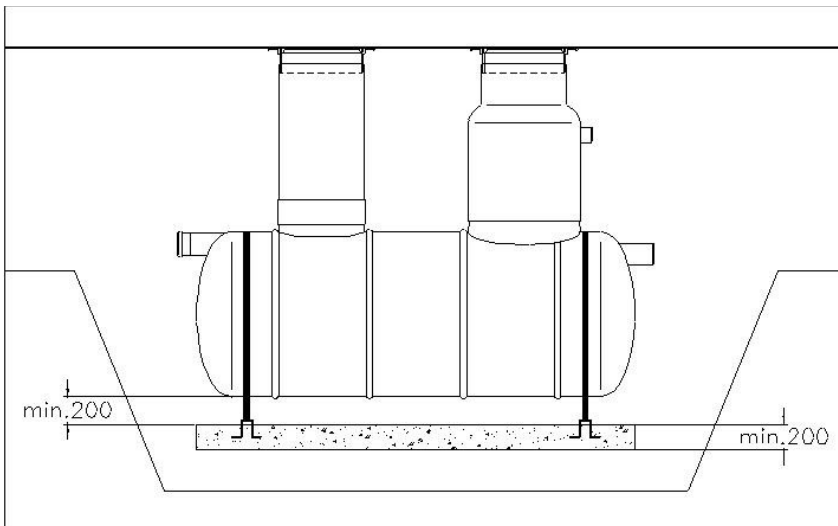
BOTTOM PLATE

Weight of the plate and filling material acting on the grease trap and the bottom plate ensure that the trap stays in a fixed position underground.

The concrete bottom plate must have a thickness of at least 200 mm and the same length as the trap. The plate's length must be minimally 600 mm less than the diameter of the container. If the soil is very unstable, it may be helpful to widen the bottom plate until it reaches walls of the pit or to cast thicker bottom plate.

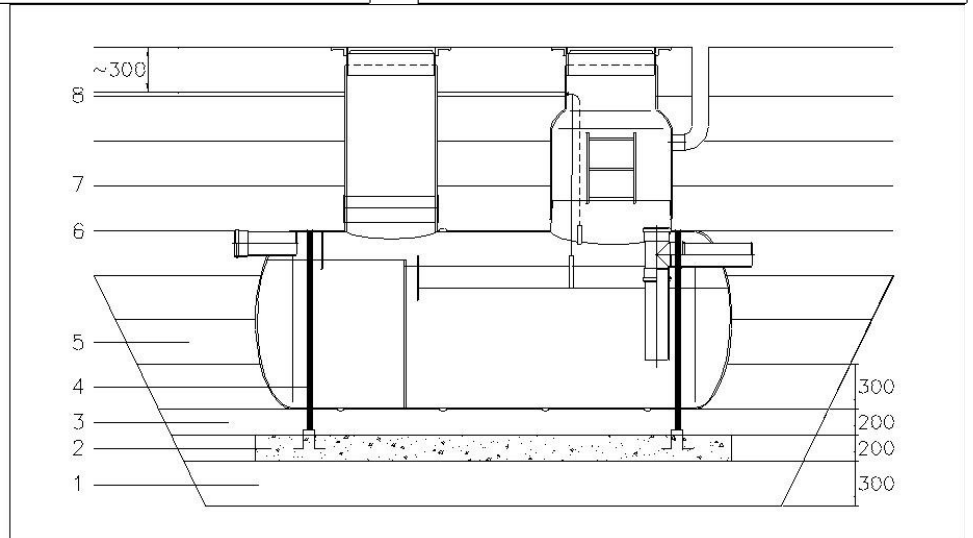
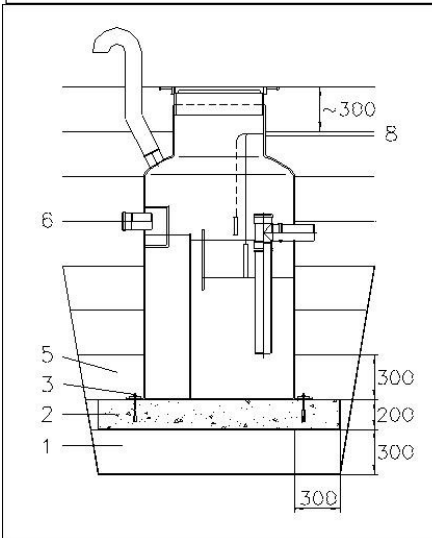
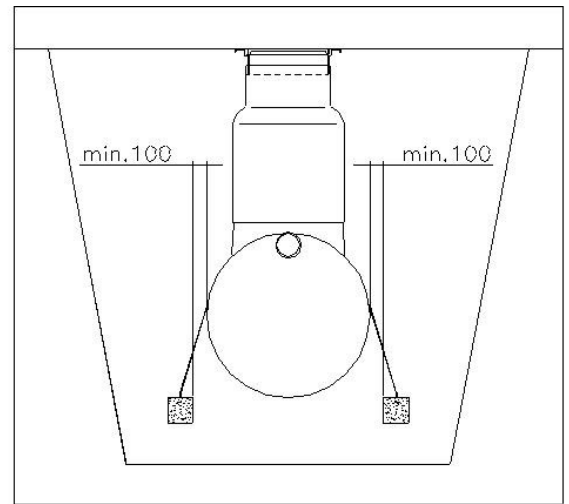
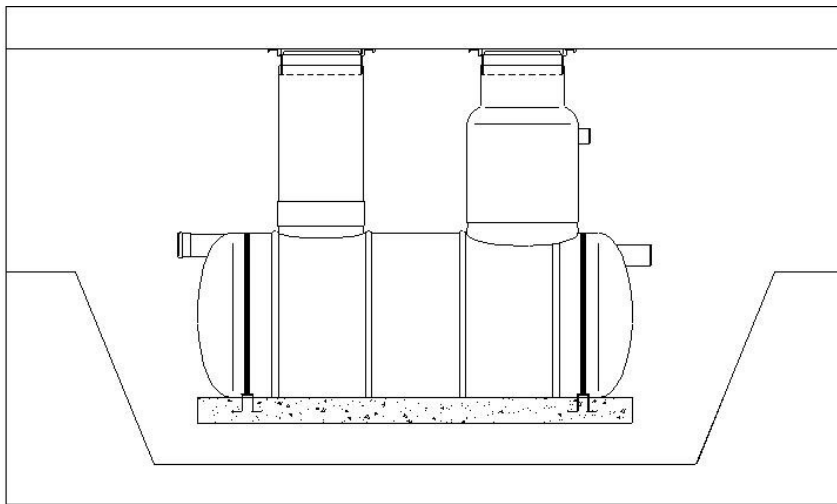
The plate should be reinforced with double wire mesh (interval 200 x 200, wire diameter 7 mm). Anchoring loops are cast into the bottom plate. As an alternative anchoring bolts may be affixed to the plate.

A 200 mm stone-free sand cushion must be left between the bottom plate and the container.



CONCRETE BLOCKS

The blocks must have sufficient size and weight to prevent the container's rising to the surface. They must have the same length as the grease trap and must be placed to both sides of the trap in parallel with it. Anchoring belts can be fixed around the blocks or into the attachment brackets cast into the blocks.

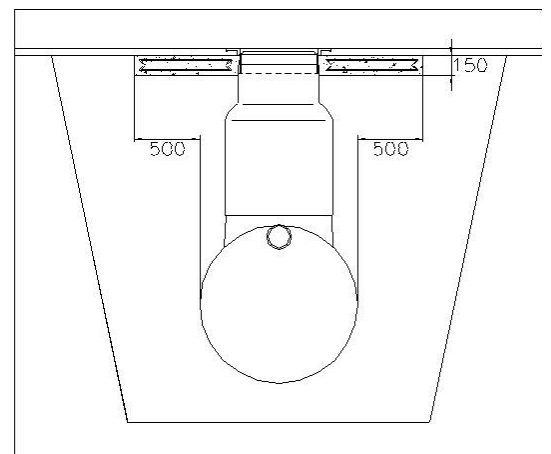
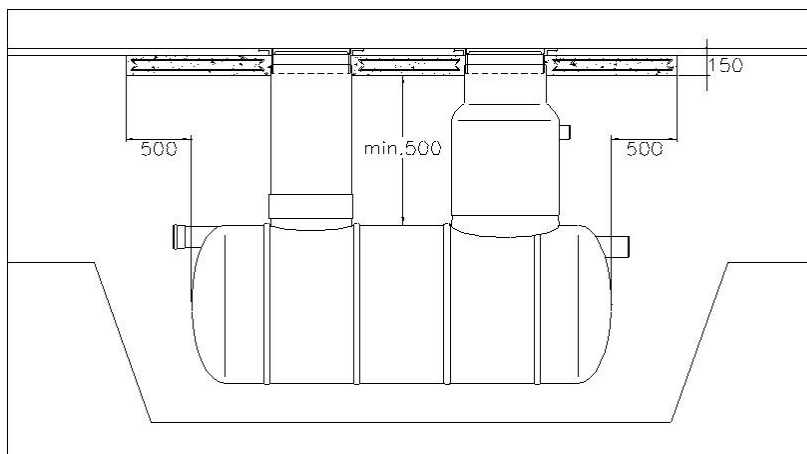


NB! If the pit fills with water during installation, it should be emptied using a pump.

3.2 INSTALLATION UNDER ROADS

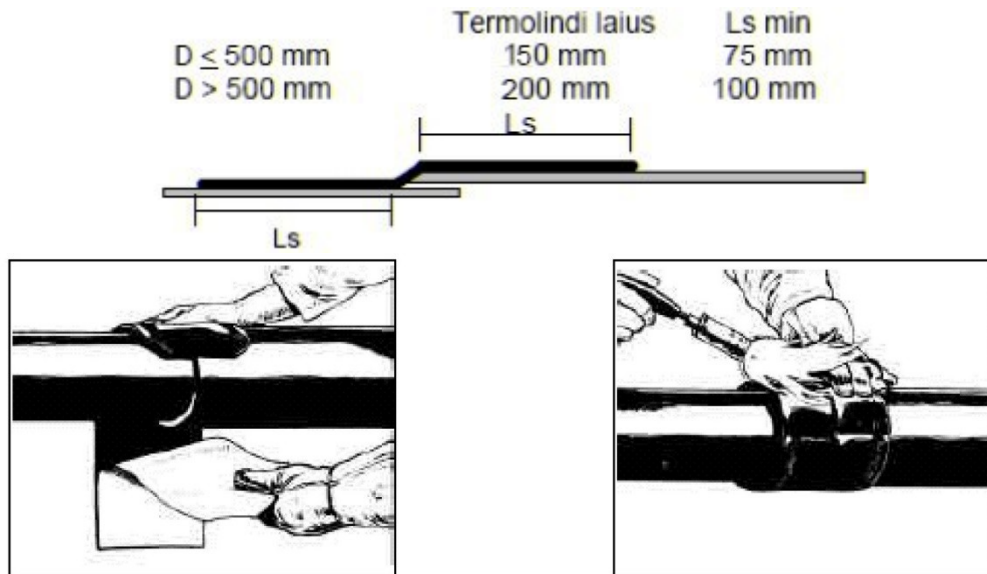
If the grease trap is installed into an area that is being run over by vehicles, the filling layer thickness over the trap must be at least 500 mm. On the filling layer, a load balancing plate made of frost-resistant concrete with at least 150 mm thickness must be cast or installed that is reinforced in accordance to the load that impacts the plate (suggested reinforcement – profile 10, #150).

The load balancing plate must have at least 1,000 mm greater diameter and length than the oil trap. If the grease trap is installed under a road, it should always be provided cast iron floating hatches. It is important to make sure that the cast iron hatches are not supported on the lip of the maintenance well and service duct.



3.3 INSTALLING MAINTENANCE WELL

Maintenance well is pushed onto the factory-installed collar of the grease trap. To make the connection waterproof, it must be covered with a heat-shrinkable tape. The heat-shrinkable tape must be 200 mm longer than the diameter of the pipe. The width of the heat-shrinkable tape must be 200 mm in case of 600 mm maintenance well.



Termolindi laius – width of the heat-shrinkable tape

4 MAINTENANCE

It is suggested to perform regular inspection and discharge once a month. Regular maintenance must be verifiable (inspection register).

Full inspection must be performed every five years that includes inspection of the system's leaks, structural shape, control device and its installation.

You should maintain the emptying and maintenance register.

Vacuum waste collection vehicle should be called immediately when alarm of the control device for grease layer is triggered. The suction tube of the truck must be lowered carefully into the trap so as not to cause damage to the trap's internal details. The suction tube should be lowered 0.5 m below grease layer. If grease layer is very firm, emptying must start deeper to break the grease layer. If, after emptying, there is congealed grease on the walls, it should be cleaned away with a pressure washer. The grease layer fill-level sensor should also be cleaned while emptying the trap.

Sand and mud chamber should be emptied when half of the sediment chamber is full. To empty the chamber, the suction tube must be lowered into the trap's bottom and suck out all sediments that have collected there. If after emptying there seems to be deposited sediment in the bottom of the trap, the bottom should be cleaned with vacuum waste collection vehicle's washing device.

After each emptying, the grease trap should always be filled with clean water. That ensures that they are immediately ready to use and reduces upward pushing force caused by the ground water.