

Matala Biofilter 25 low & high Installation and maintenance manual

Matala Biofilter 25 is suitable where you have little water consumption of max 750 l/day and 125 l/h.

Biofilter 25 is very good if the placement is in the ground and you want it frost-free. If you have the pipes in the ground, select this filter.

It is available in two heights to choose from depending on how deep the pipes are, and it is easy to cut down to the appropriate height after installation.

Water consumption of a maximum of 750 l/day and 125 l/h.

Matala grey water filter/BDT (bath, dishes & laundry) is the original and has sold in the thousands over the past 15 years.

- No consumption costs
- No electricity consumption
- No moving parts



Matala grey water filters are adapted for smaller amounts of BDT wastewater such as in small houses, holiday homes, sauna houses, building sheds and others where you do not have toilet water connected.

Not all types of grey water filters can handle high flows that you can have in year-round houses with high water consumption, then choose other technology.

The capacity is from 400 to 750 liters/day, depending on the model and accessories.

Biofilter 10 has a capacity of 400 l/day or 55 l/h and Biofilter 20 & 25 can handle 750 l/day and 125 l/h.

Function

The function is completely natural by purifying the water as it slowly flows through the patented filters that break down biological nutrients with Biofilm technology with microbes.

Since the filters are airy in the biofilter and the water varies in level all the time, no air compressor is needed for oxygenation of the biohud.

There is always some water at the bottom of the biofilter so that the biohud should always have a good environment even when the load stops.

Contents

- 1 pcs Tank with lid
- 2 pcs Implementations 110 mm
- 2 pcs green filters
- 2 pcs blue filters
- 2 pcs grey filters
- 2 pcs black filters
- 1 pcs ventilation hat 75 mm
- 1 pcs ventilation pipe 75 mm
- 1 pcs 90 degree bend, it is on the inlet
- 1 pcs manual

Dimensions/Specifications

Capacity: 750 l/day and 125 l/h.
 Height: 650 and 1300mm can be cut down to 600mm
 Width: 700mm
 Length: 700 mm
 Weight: 38kg
 Volume: about 300 liters
 Total filter area: 25 m²
 Total filter volume: 81 liters

Pipe connections

Inlet 110mm (4") 400mm cc from the bottom
 Outlet 110mm (4") 110mmcc from the bottom

Outlet when pumping is R32 internal thread 440mm cc from the bottom



Filter mats

- 2 x Green Low FSM290 (1.46m² filter area per disc)
- 2 x Blue Low FSM 365 (1.84m² filter area per disc)
- 2 x Grey Matala FSM460 (2.32m² filter area per disc)
- 2 x Black Matala FSM190 (0.92m²filter area per disc)



Placement

Biofilter 25 is very good if the placement is in the ground if you want it frost-free. If you have the pipes in the ground, then select this filter. This model also works well to set freely on the ground.

It is available in two heights to choose from depending on how deep the pipes are and it is easy to cut down to the appropriate height after installation. The biofilter must also be in such a way that it is easy to lift the lid off and inspect and clean the filter elements in the box - under normal conditions once a year.

The inlet gray water is connected to the short side that has the hole high.

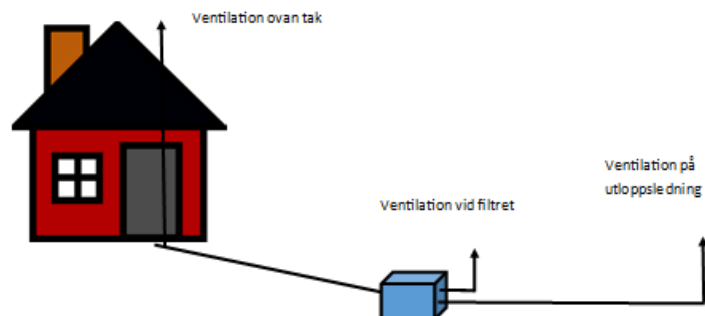
The pipes for the Biofilter shall tilt at least 1% (1 cm per meter) to ensure that wastewater does not remain in the pipes.

If it is slow to push the pipes through the sleeves, we recommend that you use lubricants.

Outgoing water is connected in the lower hole on the short side with 110mm holes.

If the Biofilter is to be used in winter, you should have insulation under the lid, this is available as an accessory.

Ventilation



You should strive to get the best possible ventilation of the biofilter, optimally ventilating as in the image above or at each end of the system.

If there is no ventilation on the roof, then ventilate at the filter or with a T-pipe somewhere before the filter on the sewer line.

Inbound air is through the pipe for outgoing water if possible or via the upper hole on the same

Outgoing air should be drawn as high as possible, over the roof is the best, this leads to a good self-draught and oxygen addition as well as pulling out any odors.

If a pump is used on the filter, you may need to do extra ventilation so that you maintain good air exchange throughout the system.

Emissions by bio filter

You can choose to release the purified water into a stone coffin or simple HS infiltration

HS infiltration bed is used as post-polishing and infiltration of water after graywater filter. The HS infiltration packages are available in different sizes and include all parts for post-polishing and infiltration.

Supplement if necessary, with parts for ground bed or dense ground bed depending on how permeable the soil is for water and how when it is to groundwater and mountains.

There is also an accessory that replaces the sand that should be located under the HS infiltration and ground bed. This fits very well when you have difficulty handling gravel and sand such as on i.e., islands.

Think about whether you're going to infiltrate into the ground to do a soil test to see if the ground can infiltrate all the water every day, so you don't get a marsh on the plot.



Maintenance

The microbial growth formed on the filter elements collects nutrients from the gray water flowing through the filter elements. The biological purification process is sensitive to poisoning (drugs, chemicals for sewage stops, chlorine, large amounts of antibacterial detergents, solutions, oil, paint or other problem waste) because they kill the microbe function of the biofilter.

It should also be avoided to lead nutritious substances, such as milk and fats to the biofilter, Nutritious substances should be composted.

Keep in mind that large amounts of greasy dishwashing water may cause the filter elements to be cleaned more often.

If the water flow through the filter elements deteriorates significantly, the filter elements should be cleaned more often. The clearest sign that the filter elements need to be cleaned is that the upper part of the filter elements (10 highest cm) is dirty. Contamination of the upper parts of the filter elements may also be due to a temporarily large amount of waste water or to a stop in the discharge site after the filter.

Position of the filter elements from inbound to outgoing water:

- 2 green filters
- 1 black filter for increased ventilation
- 2 blue filters
- 1 black filter for increased ventilation
- 2 grey filters



Cleaning

Sewage sludge contains bacteria and therefore it should be handled with caution. The easiest way is to shake off the filter elements above a compost, about 90% of the sludge then releases from the filter elements. The excluded filter elements are then put back in the biofilter.

The sludge should be composted in a latrine compost for normally 6 months to ensure full degradation of bacteria.

It should be avoided cleaning the filter elements too often, as this reduces microbial growth, which in turn leads to a deterioration in purification results.

In winter, the biofilter can be drained if there is a risk of freezing stop the flow, if you want to be able to use the biofilter in winter, you should isolate it.

The biofilter can resist freezing temperatures normally well, nothing breaks.

New filters are available as spare parts.



