

NO POWER REQUIRED!

FILTEOO[®] ONE

ATB Wastewater treatment plants new construction | retrofit | 1–6 PE

FILTEOO[®] ONE THE FILTER SYSTEM WITHOUT POWER REQUIREMENT

The FILTEOO[®] ONE system purifies wastewater for private households with up to 6 persons. The filter system is available in two sizes, 4 PE and 6 PE*.

HIGH RELIABILITY – 365 DAYS A YEAR

FILTEOO® ONE operates 365 days a year with reliable cleaning performance. Designed entirely without mechanical and electrical components, FILTEOO® ONE thus incurs minimal maintenance and servicing costs over its entire service life.



^{*}PE = Population equivalent value

MANY GOOD REASONS:

QUITE SIMPLE – WITHOUT ELECTRICITY

FILTEOO[®] ONE operates without mechanical and electronic components. No wear of moving parts occurs.

EVERYTHING CLEAN & CERTIFIED

FILTEOO® ONE guarantees environmentally compatible cleaning of wastewater for 1 to 6 persons – especially also in the underload range. This was tested and certified by several German institutions (PIA, Aachen/ DIBt, Berlin/BDZ, Leipzig) in terms of both wastewater technology and construction.

LOW COST

FILTEOO[®] ONE does not consume energy – Gravity flow and aeration by chimney effect do not require any electricity



Wind fan to support ventilation



The filter material

WHY FILTEOO[®] ONE IS THE BEST CHOICE:

SIMPLE TO OPERATE

The system is easy to operate, as it does not require electronic control.

EASY ASSEMBLY

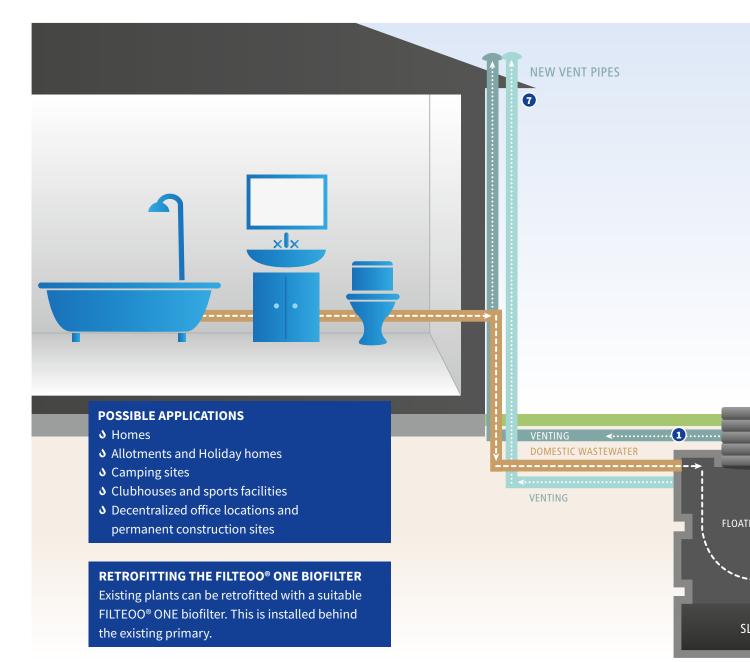
No power supply required.

SUSTAINABLE & RECYCLABLE

The construction components are 100 % recyclable. The used filter material (rock wool) is disposed of properly.



FILTEOO[®] ONE THIS IS HOW THE SYSTEM WORKS





PRIMARY SEDIMEN-TATION MODULE

The pre-sedimentation module is identical for both FILTEOO® ONE plant sizes (1–4 PE and 1–6 PE). It is supplied with an integrated pre-filter (Ø 110 mm) made of polypropylene and stainless steel.

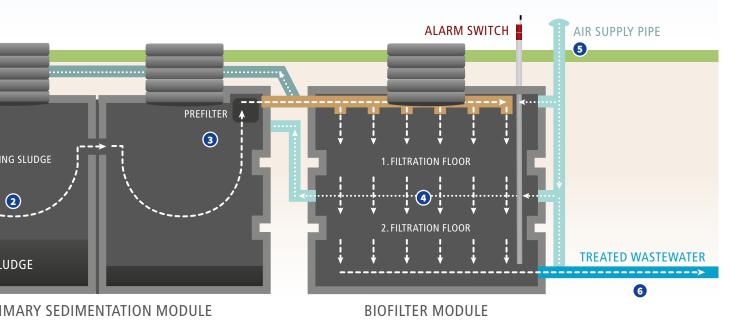
CASE from stable and resistant PE material	
LENGTH2,70 m	
WIDTH1,15 m	
HEIGHT1,95 m to 1,65 m (depending on installation depth)	
TOTAL VOLUME3.60 m ³	
WEIGHT (empty)270 kg	

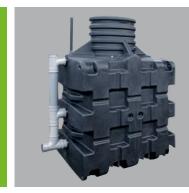
PR

- The domestic wastewater flows into the primary treatment module.
- Pats and other floating substances remain on the surface of the water in the primary sedimentation and form a floating sludge layer. Heavy substances settle and collect on the bottom of the primary settlement tank.
- 3 An integrated, easily removable pre-filter between the primary sedimentation module and the biofilter retains suspended solids, fats and other filterable substances.
- The biofilter consists of two filtration layers with special rock wool and a ventilation layer in between. The aeration takes place completely without electricity through the so-called chimney effect. The pre-cleaned wastewater from the pre-

treatment module is directed to the surface of the first filtration floor by means of adjustable distribution pipes. The water then trickles from the upper filtration floor over the aeration layer, where it is enriched with oxygen, to the second filtration floor.

- Air is drawn into the aeration floor of the biofilter via the supply air line near the floor.
- After the treatment process, the wastewater is discharged into surface water or infiltrates into the soil.
- For the chimney effect, the exhaust pipes are fixed with a height difference of at least 3 m, e.g. on the house facade or similar. In addition, another vent is necessary between the pre-treatment and the biofilter.





BIOFILTER MODULE

The difference between both module sizes is in the length of the tanks.

CASE from stable and PE	
LENGTH1,85 m (1–6 PE)/1,35 n	h (1–4 PE)
WIDTH	1,15 m
HEIGHT 1,95 m (depending on installation	to 1,65 m on depth)
WEIGHT (empty) 366 kg 260 kg	(1–6 EW) (1–4 EW)

INSTALLATION MADE EASY IN JUST FIVE STEPS

EFFICIENT, SIMPLE & FLEXIBLE

- Seasy and fast installation
- Low cost
- Garden-friendly: no heavy equipment necessary
- Easy for later installation on your property (retrofitting)
- Solution Flexible arrangement of modules possible

The FILTEOO® ONE complete system consists of two stable tanks (one pre-treatment and one biofilter module). The plastic tanks are made without a welding seam and are one hundred percent watertight.

FILTEOO® ONE is a lightweight. The heaviest individual component weighs no more than 366 kg. This reduces installation costs, since no heavy equipment is required for installation. The installation is gentle on the garden. Retrofitting behind an existing primary tank is also no problem.

FILTEOO[®] ONE modules are flexible in their arrangement. in a row or across corners – many different installation variants are possible.

STEP 1

The first step is to excavate a pit only two meters deep. This work is done with the support of a mini-excavator (2.5 t).

STEP 2

The complete system is placed in the excavation pit.

STEP 3

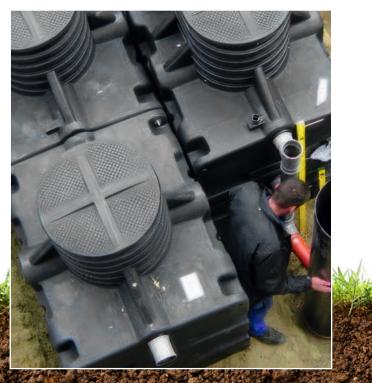
Then the connection to the sewage pipe of your house is made. At the same time, the drain line of the FILTEOO[®] ONE is connected to the infiltration or discharge into the receiving water.

STEP 4

Two pipes are laid for venting the system. Both lines can be mounted directly on the house or be mounted freestanding.

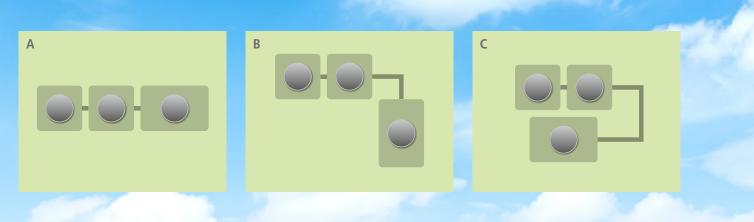
STEP 5

The installation pit is filled with a sand and gravel mixture, while the primary sedimentation module is filled evenly.





INDIVIDUAL THE POSSIBLE INSTALLATION VARIANTS



The two tanks of the pre-treatment module and the tank of the biofilter can be arranged in different variants as desired. The tanks are installed in the ground, with only their lids and the ventilation pipes visible. The FILTEOO® ONE complete system can thus be integrated into any garden and meadow landscape.

RETROFITTING THE FILTEOO® ONE BIOFILTER

Existing plants can be retrofitted with a suitable FILTEOO® ONE biofilter. This is installed behind the existing sedimentation tank with the aid of the associated pipe kit. The requirement for this is the proven tightness of the existing septic tank. Only a small amount of space is required for the retrofit, whereby the biofilter can also be installed across corners according to your wishes.







ATB WATER GmbH Südstraße 2 D-32457 Porta Westfalica Phone: +49 5731 30230-0 Fax: +49 5731 30230-30 E-mail: info@atbwater.com Website: www.atbwater.com



water:hub South-East Asia



German Water Partnership





youtube.com/user/atbwasser

