

FUNDAMENTALS FOR SEPARERA MODELS:

Really obvious

The unique thing with separation is that it takes care of the faeces and urine in separate ways. When you are using a Separera the idea is that the waste is separated, (urine and faeces), while it is being used. This means that the toilet consists of two separate chambers, one inside the toilet for faeces and toiletpaper and one container outside the house for the urine.

Hygienic and comfortable

The urine bowl is big (width 33cm, length 18cm, depth 19cm) all to avoid splashing while it is being used. This is very important as a matter of hygiene. The chamber for faeces is specially designed for good function and easy handling. The container has a cover with a handle that makes it easy to carry out and replace with the other chamber. The two chambers should be used alternatively. The fan provides the compost with oxygen as well as dries out some of the moisture at the same time as it makes the bathroom odour free.

Faeces

In normal use a family of four people produces about 7 litres of waste per week which means that the compost chamber has to be replaced after 4-8 weeks of use. This has to be composted for about 6 months before it can be used as compost in the garden. The Separera is delivered with two compost chambers; one to be used in the toilet while the other one is standing outside for composting.

Urine

In normal use a family of four people produces about 35-litre urine per week. Urine is sterile and very good as a fertilizer when it is diluted with 8 times of water. This

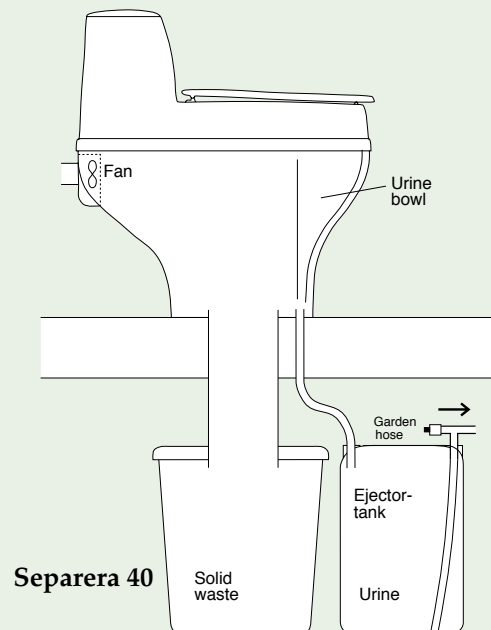
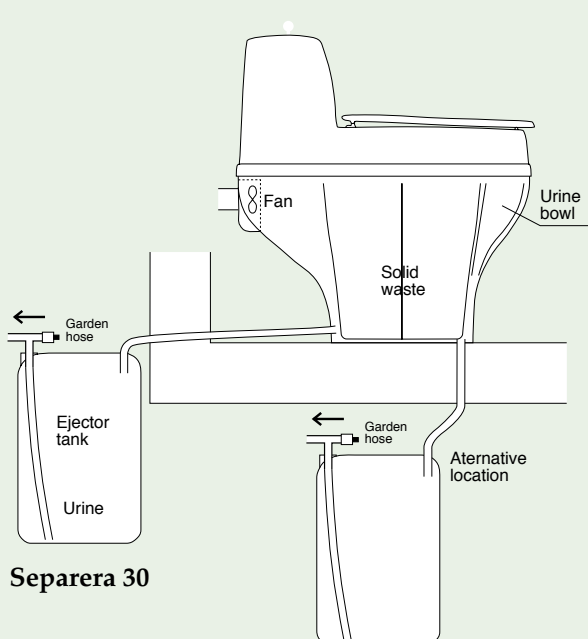
dilution is done automatically through the injector installed on top of the tank for the urine. 35 litres of urine have the same quantity of fertilizing substance as 3 kg fertilizer and therefore it is very important to spread it over as big an area as possible. This is to avoid that the solution reaches groundwater or other water courses. The ground temperature should be at least 6°C when the solution is spread in order for the vegetation to absorb the nutrients.

Install it yourself

All needed for the ventilation through the wall behind the toilet is included, 0,5 m pipe and insect-netting. In order to go through the ceiling, (to get a natural draught) you will need the BioLet installation kit and the special adapter. Two different alternatives for the drain hose from the toilet either, through the floor under the toilet or out in the back of the toilet and through wall. When installing Separera 40 it is necessary to make a hole in the floor in order to connect composting chamber and urine container to the toilet. Always contact your local environmental health officer before installation!

Choosing model

When choosing model consider how many people will be using the toilet and for how long period of time. Also if it is possible to put the chamber in the basement or not. All models have a fan of 18W which provides good ventilation, it is also available in 12 Volt. All models can be used in a unheated room and will not freeze in wintertime but consider the problem regarding the urine in wintertime. All models have compost cover so you will not see the waste, this opens automatically, when you sit down.



SEPARERA



Separera 30

A complete system for the cottage
easy to use and environmentally friendly.

BioLet®



352 005



PHOTO: Per Magnus Persson/Johnér

The most advanced self-contained composting toilet
No water, no chemicals, no odour!

THE NATURES LAW AND BIOLET:

All Composting Toilets Are Not the Same.

BioLet, with over 30 years in the market, is the most popular composting toilet in the world and is the first one to pass various governmental and independent laboratory tests in Scandinavia, the United States and around the world. BioLet composting toilets won a widely recognized gold medal at the International Inventor's Exhibition in Geneva, Switzerland for the year's best invention in the environmental field.

Since then, BioLet composting toilets have continually been improved by our qualified engineers and the BioLet 60, which has been tested and Certified by NSF International and the University of Agriculture in Norway (see www.bioforsk.no) (the most widely recognized and respected independent certification organizations for public health and safety) is the most advanced composting toilet on the market. For comfort, the environment and economics, BioLet is one of the best investments that you will ever make.

BioLet Works with Nature

Nature does its own composting. In warm weather, natural aerobic soil microorganisms digest and transform leaves, grass and other organic debris into a hygienic, inoffensive soil component called "compost". Compost provides the nutrients for new plant growth and holds moisture in the soil. Gardeners around the world utilize this process when they compost yard and garden waste and use the compost as fertilizer. BioLet unites this natural process with modern technology to accelerate and optimize biological decomposition, evaporate excess liquid and exhaust odours and water vapour all within an attractive home appliance that is easy to use and economical to operate.

It's Easy!

The process is initiated by establishing healthy compost inside the mixing chamber. A convenient package of Compost Starter containing the correct blend of organic materials is poured through the toilet seat opening into the mixing chamber. The ventilation pipe is connected, the electrical cord is plugged into a standard grounded outlet and the BioLet is ready for use. Mechanical mixing and aerating makes the material porous and sifts the composted portion into the collecting tray so that the

uncomposted portion and the dry, safe portion are kept separate. In the BioLet 45 and the BioLet 60 a microswitch controlled motor turns the internal mixers automatically. In Biolet 10 a convenient handle operates the mixers with a few gentle turns after each use. A small heater with an adjustable thermostat and an efficient fan work together to provide sufficient heat and air flow to reduce human waste by up to 95%. Excess liquid is evaporated while warm temperature is maintained inside the compost;

the fan exhausts all odour and provides oxygen for the microorganisms. The dry, much reduced remainder, or compost, collected in the tray can safely be recycled to the soil where the nutrients will be utilized for new plant growth. When used primarily in a part time vacation home or cottage, the BioLet toilets will handle the waste for up to six people, with possible occasional overload. In a full-time residential setting the BioLet 60 has been certified by the National Sanitation Foundation to handle the waste for four people. The BioLet toilet can not be damaged by freezing nor will it rust or corrode as all of its components are of

stainless steel or high impact polystyrene plastic. In applications where electricity is not accessible or impractical the BioLet Separera may be installed. It utilizes a ventilation system to evaporate liquids and provide odourless decomposing. Any excess liquid is discharged through a provided drain. Dry and beneficial compost is obtained without electricity.

Empty the Tray Only Once a year!

Usage and local temperature will determine the actual frequency, but in a part-time vacation home or cottage, annual removal of the compost is usually more than sufficient. During this period, human waste and paper have been completely transformed into valuable compost. When the mixing chamber is full, simply remove the front cover of the collecting tray, pull out the tray containing the processed compost and mix it into the soil where its nutrients will safely generate new plant growth. Instead of polluting the ground, oceans, lakes and streams the BioLet transforms human waste into a valuable material that is safely returned to the soil to enrich it.



BIOLET! THE BEST S

BioLet is the result of more than 30 years of development in close contact with the user.

Choose the right model

BioLet looks like an ordinary toilet with a modern design which makes it easy to fit into the bathroom. When choosing the model, you have to consider two things: the capacity, how many people will use the toilet and is it in a permanent home or a cottage situation. You can also choose the standard unit where you have to turn the handle after each use and adjust the thermostat according to how many people are using the toilet or choose the BioLet 45/60 where this is done automatically. Always choose a toilet with larger capacity than needed even if all models can handle a certain time of over-load. The bathroom should have an temperature of +18 C while the toilet is being used. Before leaving the house, switch off the toilet and the temperature in the bathroom can be freezing without any damage to the toilet. The electrical consumption is low so the cost of running the toilet is also very low. BioLet is manufactured in polystyrene plastic and stainless steel so it does not freeze or rust. The smooth design makes it easy to keep clean.

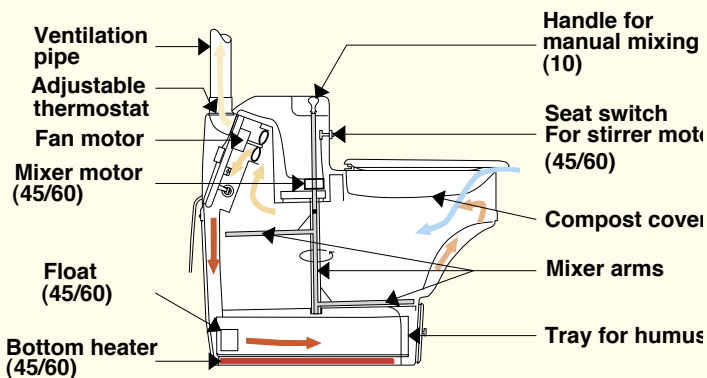


BIOLET 10

The BioLet 10 is the original BioLet composting Toilet. While we have added automatic mixing to some models. In BioLet 10 a conveniently located handle that is turned after each use. This easy maintenance ensures accurate mixing of the compost and accelerates the microbes activity. Equipped with a heating element, a fan and a thermostat, the BioLet 10 has all the basics for good composting. As is true of all BioLet models, the Standard is equipped with a compost cover that hides the material from view and opens automatically when sitting. Another feature engineered exclusively by BioLet. The seat height of only 50 cm, makes the BioLet very comfortable to use and it has no awkward foot- or stool to hamper children and the elderly. It's reliable and proven technology makes the BioLet 10 a good investment for both you and the environment.

Capacity: 3-4 people in a vacation home
Electrical consumption: 20-225 W/h
Measurement: H 65xW 55xD 71 cm.

The princible of BioLet.



The patented re-circulation of warm air and the adjustable thermostat which can be set according to the number of people using the toilet makes the running cost very low. The fan pushes warm air under and around the compost in order for the compost to have the optimal temperature for fast composting and evaporation of the liquid. The efficient mixing of the compost ensures enough oxygen for the composting process.



The compost in the tray is easy to remove and empty. (BioLet 45, BioLet 60 and BioLet 10.)

SELLING COMPOSTING TOILETS



BIOLET 45

The elegant, fully automatic BioLet 45 decorates every bathroom with its pleasing compact design, all within an attractive body of durable, polished polystyrene plastic. BioLet 45 is equipped with 3 mixing arms with "cutting blades" to help break-down toilet paper and keep the compost in an airy, homogenous state, and a float switch that operates the heaters when liquid is detected. An extra heating element in the bottom helps evaporate excess liquid. The BioLet 45 is equipped with a patented grate which prevents compost from falling into the bottom of the toilet and also keeps the liquid in the compost in order to keep it moist.

Capacity: 4 people in a vacation home or 2-3 people in a permanent home.

Electrical consumption: 20-350 W/h

Measurement: H 65xW 55xD 71 cm.



All models of Biolet and Separera are equipped with the automatic Compost Cover.



BIOLET 60

BioLet 60 is the only Swedish made certified biological toilet. It has passed the most extensive testing available to certify the toilets quality environmental and functional performance. Qualification for receiving the certification include that the toilet should have the capacity for 4 people in a permanent home. Test criteria and test report are available on www.mulltoa.com. BioLet 60 is identical to BioLet 45, except that the composting volume is 40% larger, increasing the capacity for regular use as well as for temporary overload

Capacity: 4-6 people in a vacation home or 4 people in a permanent home.

Maximum electrical consumption: 355W

Measurement: H 66xW 65xD 81 cm – necessary floor space 65 x 135 cm.



BIOLET SEPARERA



SEPARERA 30

This model has an elegant design at the same time as it is very functional. The toilet is equipped with a compost cover so when the toilet seat is opened you only see a white cover. When you use the toilet (you always have to sit down) it automatically opens the compost cover and closes afterwards. The advantage of separating toilets is that it makes it easier to take care of human waste, when the urine is separated from the solid waste, reducing the waste by up to 90%. How is this done? The interior of the toilet is designed in such a way that when using the toilet, there is a bowl underneath the seat in the front of the toilet opening, collecting all the urine which is thereafter piped to the outside, either to the grey water system, pit system or ejector tank. The solid waste is separated by a barrier from the urine bowl. The composting chamber for collecting the solid waste is located behind the urine bowl. Before using the toilet a plastic bag should be put into the composting chamber. When the bag is 2/3 full it should be taken out for composting for at least 6 months. The capacity is big enough for four people in a cottage, requiring only to be emptied once a year. The ejector tank (not included) for the liquid is placed either outside the house or underneath the floor. When the ejector tank is full you just hook it up to the garden hose and you can water (fertilize) the lawn. The water and the urine is automatically mixed 8-1 part which makes it an excellent fertilizer. The fan draws air through the toilet which makes the bathroom completely odour free, it can also run on a 12 v fan. It can be used without electricity but then you need to install a vent pipe from the toilet above the roof creating a draught.



SEPARERA 40

This model looks almost like an ordinary flush toilet and has the same size. The toilet is equipped with a compost cover so when the toilet lid is opened you only see a white cover. When you use the toilet (you always have to sit down) it automatically opens the compost cover and closes afterwards. This model has the composting chamber underneath the floor which allows larger volume and therefore larger capacity. It is supplied with two composting chambers, while one is being used the other one is placed in the garden for further composting. Measurements: H 64 x W 40 x D 68 cm
Electrical consumption 18 W/h



Composting chamber for Separera 30 with handle.