



BIOLAN

SIMPLETT PLUS

Instructions for use

The Biolan Simplett Plus dry toilet can be installed directly on a floor surface and is suited for both indoor and outdoor use. The functioning of the Simplett Plus is based on the separation of liquid and solid waste in the seat part. No water or power supply is required.

Contents

Component list	4
1. PLANNING AND INSTALLATION	5
1.1 Technical specifications	5
1.2 Year-round use of the dry toilet	5
1.3 Ventilation	6
1.4 Liquid removal	6
2. SIMPLETT PLUS USE AND MAINTENANCE	7
2.1 Using the bulking agent	7
2.2 Unloading the receptacle	7
2.3 Emptying the liquid tank	8
2.4 Composting solid waste	8
2.5 Cleaning	8
3. TROUBLESHOOTING	8
3.1 Odour	8
3.2 Insects and their larvae	8
Warranty	8

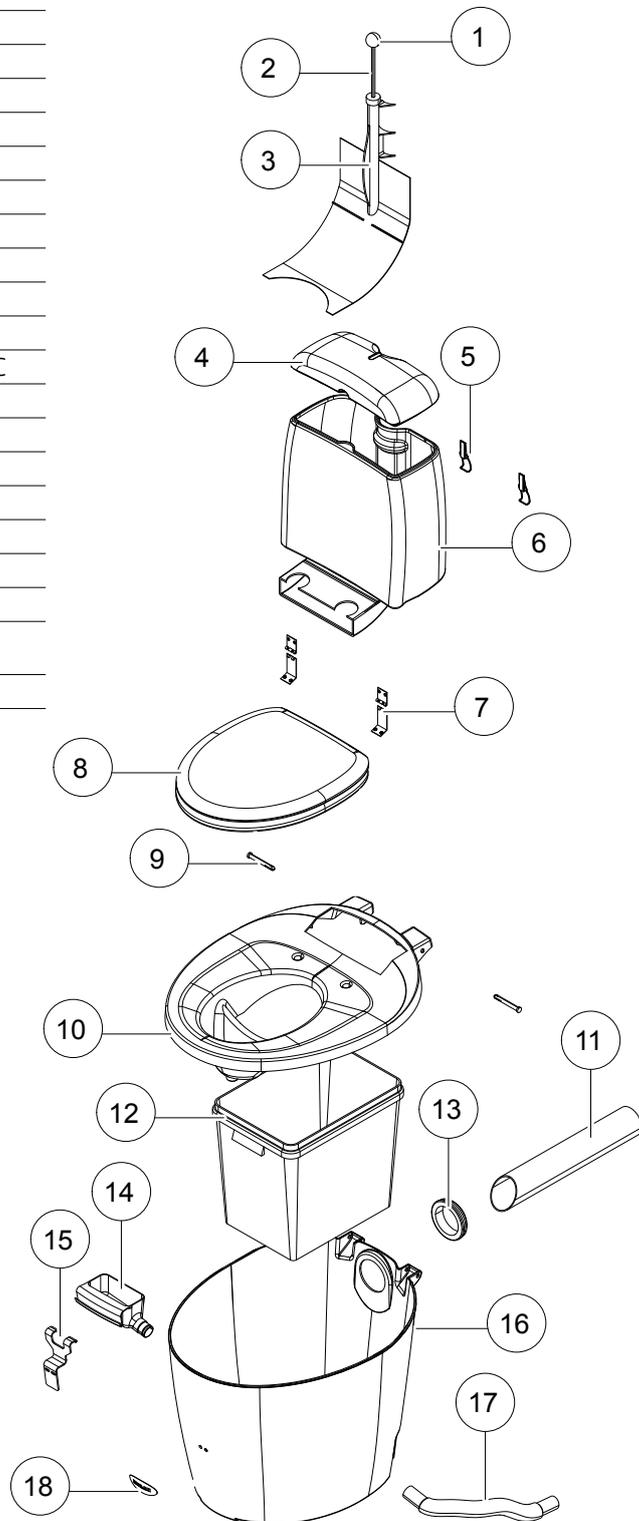
Keep these instructions for use!

EN



Component list

Part	Item	Part number	Material
1	Dispenser knob	-	PE
2	Dispenser axle	-	RST
3	Dispenser plate	-	PE
4	Bulking material container lid	-	PE
5	Latches	-	RST
6	Bulking material container	-	PE
7	Container's hinges	-	RST
8	Pehvakka thermal seat	70578500	PPE
9	Hinge pin, 2 pcs	18726240	PE
10	Toilet tank lid	-	PE
11	Horizontal ventilation pipe	28704055	PP or PVC
12	Receptacle	18703050	PP
13	Lead-through rubber 75/83	18001001	EPDM
14	Liquid funnel	18703180	PE
15	Liquid funnel fixing	21570210	RST
16	Toilet tank	17703070	PE
17	Flexible liquid pipe	28578010	PE
18	Logo plate	21570210	RST
Includes in addition to the parts shown in the detail:			
	Ventilation pipe cap, Ø 75 mm	40580007	PE
	Instructions for use	27703150	PAPER



(EN) INSTRUCTIONS FOR USE

1. PLANNING AND INSTALLATION

Install Biolan Simplett Plus horizontally on a floor surface. When selecting the location, consider the organisation of the ventilation and liquid removal and leave enough space for use and maintenance. The device should be placed so that the ventilation pipe is easy to bring outside. Leave enough room between the device and the wall to make unloading of the device easier.

The device is delivered with the bulking material container turned downward. Lift the container and lock the latches (Figure 1).

1.1 Technical specifications

- depth 680 mm
- width 530 mm
- seat height 465 mm
- height 1,020 mm
- weight 10 kg
- receptacle volume 28 litres
- outer diameter of the drain pipe 32 mm
- length of the drain pipe 335–935 mm

1.2 Year-round use of the dry toilet

When installed in a heated space, you can use the Simplett Plus device all year round. In this case, ventilation and liquid removal must be thermally insulated in cold sections, and the drain pipe has to have a sufficient tilt to prevent liquid from freezing in the pipe. If liquid is collected in a canister, it has to be emptied in autumn to prevent the canister from breaking if it freezes. A dry toilet installed in a non-heated space can be occasionally used during winter. Simplett Plus is manufactured from cold-resistant materials that will not get damaged in freezing temperatures.



Figure 1

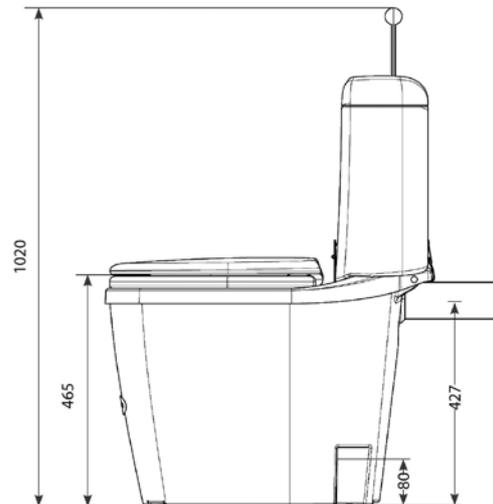
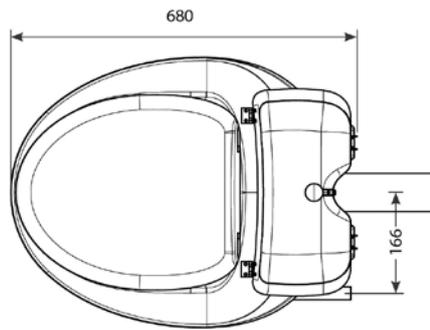


Figure 2

1.3 Ventilation

Installing the horizontal ventilation pipe

Install the horizontal ventilation pipe (part 11) in the device. Ensure that the pipe end comes on top of the receptacle so that possible condensate drains in the receptacle (see Figure 3).

Ventilation pipe through the back wall

Install the ventilation pipe through the back wall (Figure 4). Drill a lead-through of at least $\text{Ø} 75 \text{ mm}$ on the back wall for the horizontal ventilation pipe (part 11) according to the dimensioned drawing (Figure 2). The hole drilled in the wall must be a little higher than the hole in the device to ensure the condensate does not remain stagnant in the pipe. Cut the horizontal ventilation pipe to the correct length so that the bend used connects to the vertical ventilation pipe with as gentle curve as possible. Ensure that the pipe is positioned inside the dry toilet as shown in Figure 3.

The horizontal ventilation pipe is extended with a sewer pipe of $\text{Ø} 75 \text{ mm}$ until it reaches above the roof ridge. Biolan Ventilation Tube Package has been specifically designed for this purpose, and it is available as an accessory. Suitable pipe is also available at specialised HVAC shops and well-stocked hardware shops. It is recommended that a rounded bend is used. Additional curves in the ventilation pipe disrupt natural ventilation and can cause unwanted odours. Ventilation can be further improved by using Biolan Wind Fan.

Ventilation pipe in the toilet space

The ventilation pipe can be routed from the toilet to the roof according to the instructions given above (Figure 5). The lead-through to the roof can be sealed with a specific roof lead-through set. Hardware shops sell lead-throughs as accessories.

1.4 Liquid removal

Installing the liquid funnel and the liquid pipe

Attach the liquid funnel (part 14) to the liquid pipe (part 17), and install the funnel in the bracket (part 15) inside the device. Route the liquid pipe around the receptacle through the hole on the back of the device. The pipe is flexible, and its length can be adjusted by pulling both ends. If the site does not include sewerage, make a hole of at least $\text{Ø} 43 \text{ mm}$ for the liquid removal pipe (part 17) on the back wall or the floor (Figure 5).

Draining liquid

The liquid pipe must be led to a closed canister, container or sewerage system. In dimensioning the liquid tank and selecting its location, consider the fact that the volume of urine excreted daily is approximately 1–1.5 litres per person. Ensure a sufficient tilt when installing the liquid pipe so that liquid will flow naturally downwards. This means that the hole made in the wall must be lower than the hole in the device (2–3 cm/m). The canister can be placed on its side or buried in the ground. Sewer pipe parts of $\text{Ø} 32 \text{ mm}$ are also suitable for extending the liquid pipe. It is recommended that you use a sleeve in the joints.

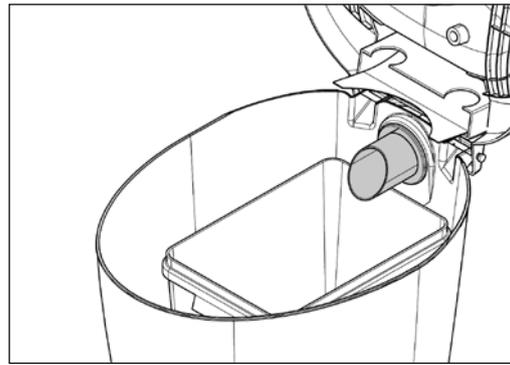


Figure 3

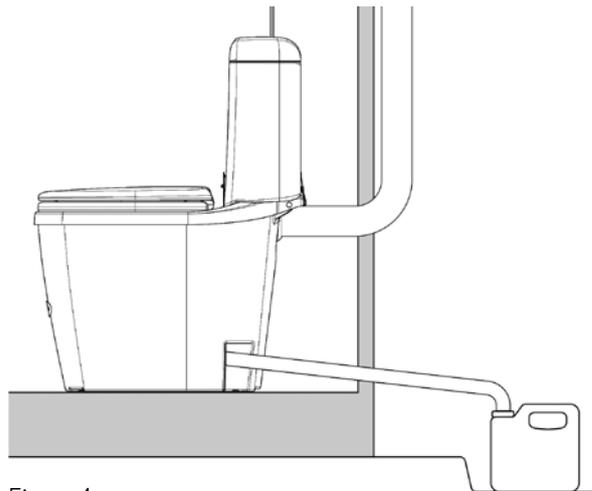


Figure 4

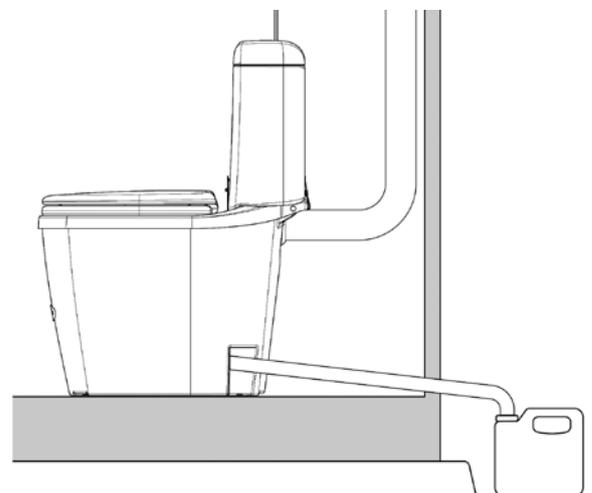


Figure 5



Nutrient-rich liquids cannot be discharged directly into the ground because they cause excessive point-source nutrient loading.



For more information on regulations concerning composting, contact your local waste advisor. More information on composting and using urine can be found at www.biolan.com.

2. SIMPLETT PLUS USE AND MAINTENANCE

The Simplett Plus dry toilet is always used while sitting to ensure separation of solid matter and liquid.

When using the toilet for the first few times, it is recommended that you pay attention to a correct sitting position so that the urine is directed to the right place.

Remember to guide your guests in how to use the toilet.

In addition to toilet waste, you can throw toilet paper and compostable sanitary wipes in your Simplett Plus dry toilet.

Do not throw the following in the toilet:

- sanitary towels, trash
- chemicals, lime
- detergents, washing water
- ash, cigarette ends, matches

2.1 Using the bulking agent

Using a suitable bulking agent is crucial for the proper functioning of the toilet. The recommended bulking agent is Biolan Toilet Bulking Material. Before use, place a couple of centimetres of the bulking agent on the bottom of the receptacle (part 12). Fill the bulking agent container (part 6) with bulking agent (Figure 6).

Add more bulking agent only after “number two” by pressing the dispenser knob (Figure 7).

2.2 Unloading the receptacle

When the receptacle in the toilet is full, it is unloaded in the composter. Open the locks behind the bulking agent container and turn the container on top of the seat (Figure 8). Open the container lid (Figure 9). Lift up the receptacle from the device and unload it (Figure 10).

Place the unloaded receptacle back inside the device, close the lid, lift the bulking agent container up, and lock the latches. If you use a biodegradable bag inside the container, place the contents and the bag separately in the composter to make the composting process more efficient. You can also place a piece of newspaper on the bottom of the receptacle under the bulking agent.

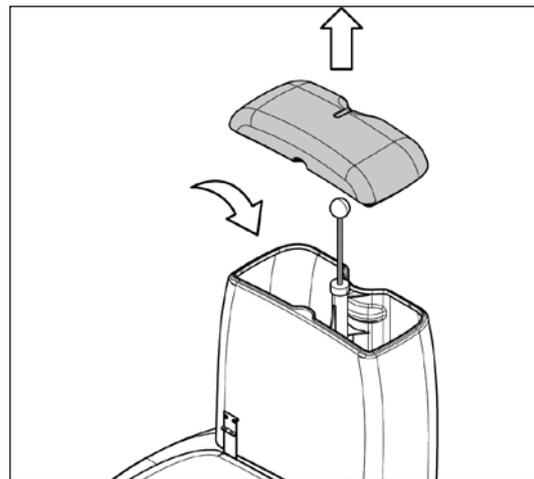


Figure 6

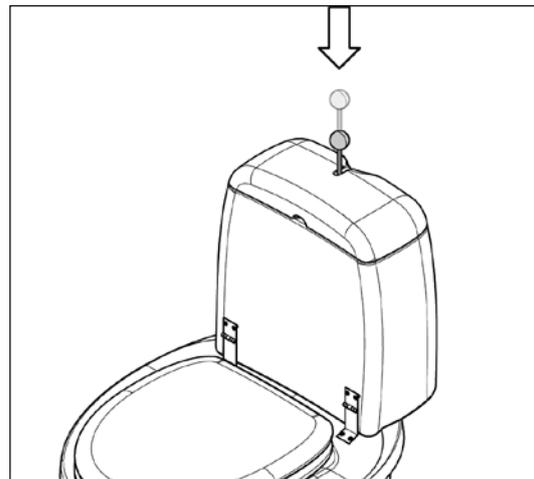


Figure 7



Figure 8

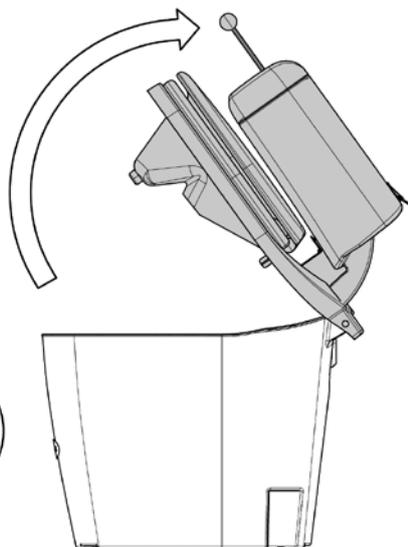


Figure 9

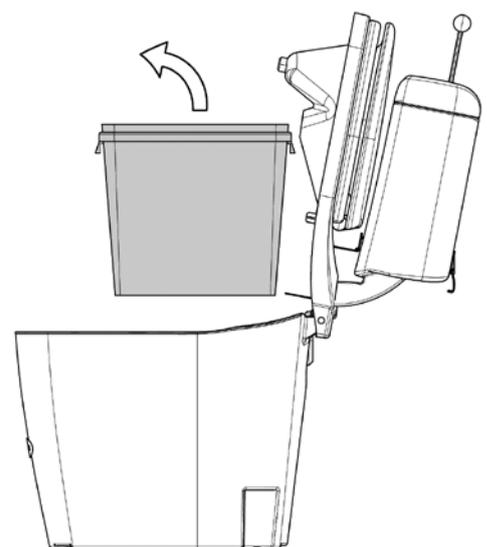


Figure 10

2.3 Emptying the liquid tank

Empty the liquid tank when required, but always before winter to prevent the tank from breaking when it freezes. Urine contains a lot of nutrients, especially nitrogen. It can be used right away as a fertiliser in the garden by diluting it with water in a ratio of 1:5 or as such after letting it stand for three months.

2.4 Composting solid waste

For hygienic reasons, all solid waste unloaded from the Simplett Plus dry toilet has to be composted before using it in the garden: at least for a year before using it as a fertiliser for edible plants and about six months before using it for ornamental plants. You can compost toilet waste as such or with garden or household waste. Consider local rules and regulations for waste management and sufficient safety distances to neighbours, wells and waterways. Burying waste in the ground is prohibited. Composting toilet waste always requires a closed composter equipped with a lid. Compost waste in accordance with local instructions.

2.5 Cleaning

All parts of the Simplett Plus dry toilet can be cleaned using general household detergents. The toilet lid can be removed from the body. When you disconnect the device from its drain pipes and ventilation pipes, you can move the device outside. Wash the liquid bowl and funnel (parts 10 and 14) of the lid and flush the liquid pipe (part 17) with warm water and mild detergent or washing soda at least once a year to remove the sediment formed by urine.

3. TROUBLESHOOTING

3.1 Odour

If unwanted odour occurs, check that there is no liquid on the bottom of the device under the receptacle. If there is liquid on the bottom, check the joints of the liquid pipe and wash the inner parts of the device if required (see section 2.5). You can also prevent odour issues by pouring a little bit of water into the liquid funnel after each use. Remember to cover the waste with a sufficient amount of bulking agent.

3.2 Insects and their larvae

If there are flies or similar in the toilet, unload and wash the receptacle and check the cleanliness of the body section (see section 2.5). Destroy the insects flying in the toilet with a sprayable pyrethrin-based insecticide. Contact your seller for advice on how to select a suitable product. Also ensure that ventilation is sufficient and that the bulking agent has been used appropriately.

Warranty

The Biolan Simplett Plus dry toilet has a one-year warranty.

1. The warranty is valid from the date of purchase and covers possible defects in material and workmanship. The warranty does not cover any indirect damage.
2. Biolan Oy reserves the right to either repair or replace damaged parts at its discretion.
3. Any damage resulting from careless or forcible handling of the device, failure to observe the operating instructions, or normal wear and tear are not covered by this warranty.

In warranty-related matters, please consult Biolan Oy directly.



BIOLAN

Biolan Oy
P.O. Box 2, 27501 Kauttua, FINLAND
www.biolan.com