

The Eco-Toilet for developing countries

INSTRUCTIONS FOR USERS



Dry toilets with composting are not only good for you and your family, but also for the environment!

ECO-TOILET what is it?

It is an ecological toilet that does not require water and is still hygienic. You can relieve yourself undisturbed in this toilet. The entrance door to the cabin can be locked from the inside. No one can see or disturb you.

The toilet cabin is equipped with the following facilities:

- A dry toilet with seat and lid.
- A holder for toilet paper or newspaper with which you can clean yourself.
- A urinal for men.
- A small washbasin with a mirror above it and a soap dispenser so you can wash your hands.

How do these WCs work?

1. Open the lid over the toilet seat.
2. Sit on the toilet seat and relieve yourself. Urine and faeces fall into the 60 litre container under the toilet opening.
3. Stand up and clean yourself with paper. Throw the used paper through the toilet opening into the 60-litre container.
4. To reduce bad odours, sprinkle organic material from the material container next to the toilet into the opening of the toilet. Be careful not to spill anything next to it.
5. Check that the toilet seat and floor around the toilet are clean and close the lid over the toilet seat. Wash your hands with soap. Leave the cabin.



How to avoid bad smell?



To prevent bad odours from the toilet, the following dry, organic material is suitable: sawdust, wood shavings, wood ash, fine straw, flower petals, coffee or cocoa husks, etc. Put the material in a container next to the toilet. Make sure that there is always plenty of material in this container.

What do I do when the faeces container is full?

Open the small door at the back of the toilet cubicle and replace the full 60 litre container with an empty one. Empty the full container at your composting facility or at a suitable landfill site.



COMPOSTING pays off

Rejoice, your plants will give you more yield!



How does composting work?

All organic matter decomposes at some point. Composting speeds up the process by creating an ideal environment for bacteria and other decomposing microorganisms. The end product, humus or compost, looks like fertile soil. This dark, earthy-smelling substance works wonders on all types of soil, providing essential nutrients to help plants grow and look better. The decomposing organisms consist of bacteria, fungi and larger organisms such as worms, bugs, nematodes and many others. These organisms require four key elements: moisture,

oxygen, carbon and nitrogen. For best results, mix nitrogen-rich plants (such as clover, fresh grass clippings and livestock manure) with carbon-rich materials (such as dried leaves and twigs). If there is not a good supply of nitrogen-rich material, a handful of lawn fertiliser will help the nitrogen-carbon ratio. Moisture is provided by rain, but you may need to water or cover the compost to keep it moist. Make sure it doesn't get too muddy. Oxygen is added by turning or mixing the pile.

What is compost?

In our case, compost consists of human faeces and urine, which, together with other vegetable waste from agriculture and cooking, are turned into a valuable fertiliser for crops through composting. When left in the environment, these faeces cause water pollution and threaten public health.

COMPOSTING ELIMINATES THIS POLLUTION AND HEALTH RISKS!



Important rules for composting human excreta

1. Composting of human excrements must be carried out by a reliable and experienced person.
2. It is important that the human excrements in the container are NOT placed ON TOP OF the compost heap but IN the compost heap.
3. Push the existing composting material to the edges to create a deep trough. Fill the trough with the contents of the faeces container you need to empty.
4. Cover the new material with old compost that you have pushed to the sides.

What do you have to keep in mind for your compostings

1. A composting box is usually 1.50x1.50x1.50 metres in size. Each box should have a wall whose height can be adjusted to the contents. A system with at least three boxes is recommended.
2. Since the compost must always be moist but not wet, a shady, elevated location is best. In case of prolonged rain, the compost should be covered with a plastic sheet so that it does not get too wet. It is important that the chosen location is in a place where flooding does not occur during heavy rainfall.
3. The composting boxes can be made of wood, wire mesh, other recycled materials or even masonry materials such as cinders, bricks or stone. However, the walls must have holes so that enough air can flow through. A composting facility with faeces should be built directly on the ground. This allows organisms such as earthworms and other small soil organisms to enter the compost from below.
4. The first 40 cm high layer above the soil should consist of biological material (see „What to compost?“) without human excrement.
5. The first box is gradually filled with composting material. It reaches maturity between 18 and 24 months. The second box is filled when the first box is full. Before the second box is full, the contents of the first box are emptied and used as fertiliser. The cycle now starts again. The third box is used to store the cover material.

What is suitable for composting?

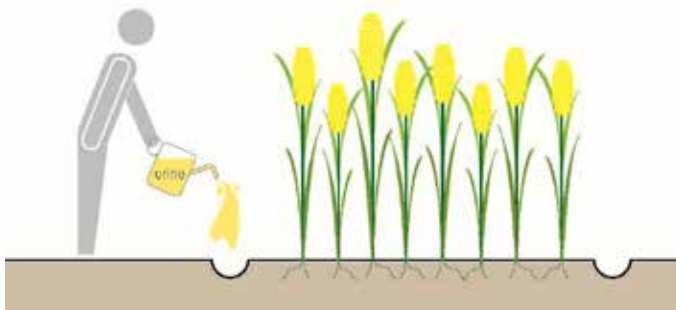
Cocoa shells, coffee grounds, fruit and vegetables, eggshells, nutshells, plants, grass clippings, garden waste, hay and straw, leaves, sawdust and wood shavings, paper, shredded newspapers, cardboard, cotton and wool

What is not suitable?

Coal and coal ash, dairy products, fat, lard, oils, meat or fish bones and waste, pet waste, dead or insect-infested plants, garden waste containing chemical pesticides.

Urine is also a good fertiliser

If your toilet has a urine tank, empty the urine onto your planting. This will do the plants good.



Eawag

Private composting



Public bin collection



We wish you a lot of success with your composting!



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