

- **EV Eco-toilet solutions**
- **AQ Biological water closets**

This brochure contains description of the above-mentioned product groups.  
For additional information, please visit our website [www.raita.com](http://www.raita.com).



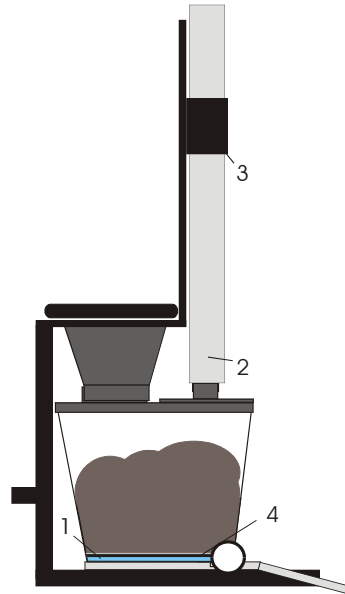
Ympäristö RAITA environment is a family business specialized in wastewater treatment in rural areas. We have supplied wastewater treatment systems for different applications in rural areas since the 1960's. We offer biochemical wastewater treatment plants, biological WC systems and equipment for more effective soil treatment for different applications in rural areas. The inventions regarding to the products are protected by patents and provided with utility model protection and protection of designs. In addition to this brochure, more information about the subject can be found on our website [www.raita.com](http://www.raita.com)

## EV Eco-toilet solutions

For summer cottages and single-family houses, as well as for recreational dwellings in year-round use

**EV Eco-toilet is an odourless and hygienic composting toilet. EV Eco-toilets are typically used in summer cottages and single-family houses.**

In Eco-toilets compost crush is used to remove moisture and to maintain good aerobic conditions. During commissioning, compost crush is placed in the bottom bin and added after each use of the toilet. The absence of odour in all conditions is ensured by correct dimensioning, effective treatment of fluids (1) and effective ventilation (2). For indoor installations, circulation of air can be improved by means of a blower (3) and evaporation of fluids by means of a thermostat-controlled heating element (4)



Our range of Eco-toilets covers the most common applications from the needs of recreational dwellings to public toilets for outdoor recreation areas. Eco-toilet EV 200 is ideal for summer cottages. EV 2x200, EV 3x200 are suitable for continuous use in recreational dwellings and EV 4x200 for use in residential units. EV 450 is suitable for heavy use in schools, hotels, residential colleges and public applications.

All models can be fitted with an adjustable blower and a heating element. Select from our EV range a model, which suits best your needs. An EV Eco-toilet is an odourless, hygienic and easy-to-maintain. For detailed description of the different models, see EV Eco-toilet brochure and Eco-toilet manual.

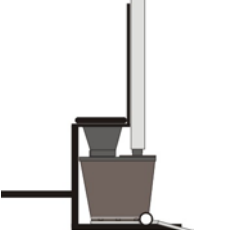
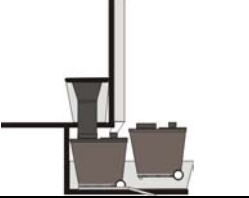


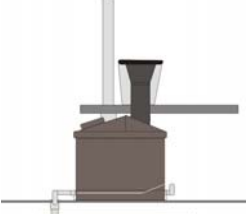


*All the EV models can be installed either into a sanitary fixture or fitted with a seat. The dimensions of the seat are 460 x 380 x 480 mm (depth x width x height).*

*Depending on the installation method, the seat or the sanitary fixture is connected to the composting bin by means of a shaft and connecting tube. The dimensions (depth x width x height) of the EV 200 tank are 620 x 826 x 547 mm. The minimum height of the space underneath the toilet is 900 mm (with sanitary fixture) and 650 mm (with seat). The bottom bin serves also as an after-composting space.*

# EV Eco-toilet solutions

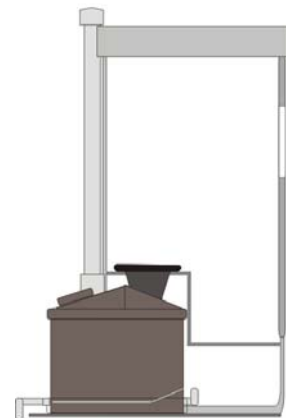
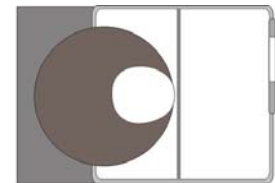
For summer cottages and single-family houses, as well as for recreational dwellings in year-round use

	<b>EV 200/ 200 uses/</b>
	<b>EV 2x200/ 500 uses/</b>
	<b>EV 3x200/ 800 uses/</b>
	<b>EV 4x200/ 1200 uses/</b>
	<b>EV 450/ 600 uses/</b>

*On top: Our EV Eco-toilet range: Model / capacity /*

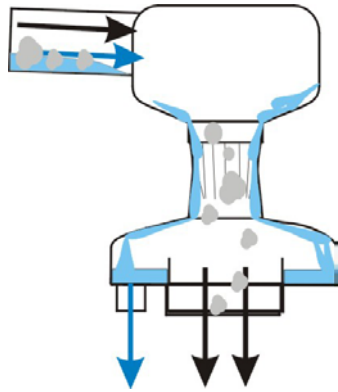
*Down a public toilet building of the Helsinki municipality's recreation area with EV 450 eco-toilets. On the right urinal in the same public toilet.*

*On the right some models of our toilet buildings. One of wood is suitable for recreations areas, one of plastic which is easy to remove for building sites etc.*



# AQ Biological water closets

For summer cottages and single-family houses, as well as for recreational dwellings in year-round use



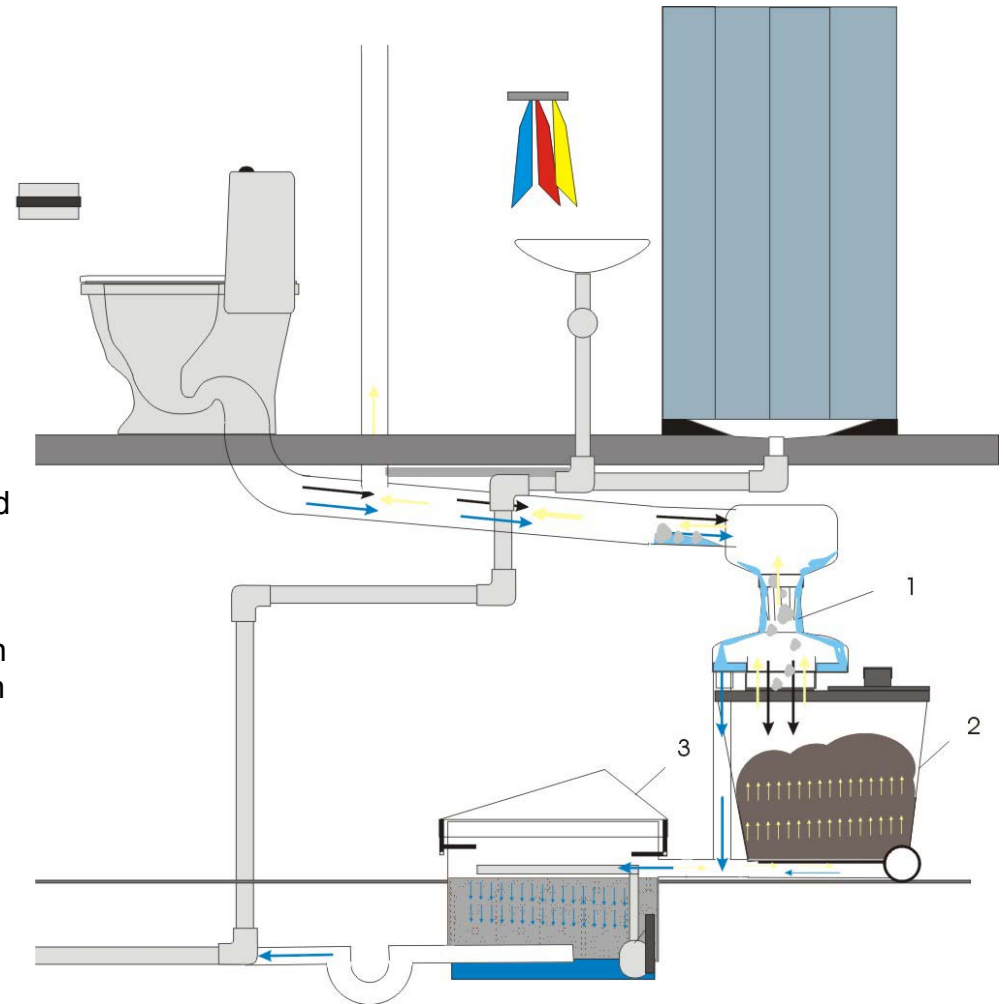
## FUNCTION

The waste flushed from the toilet is led to a separation unit, which separates liquid waste (urine and flush water) from solid waste (faeces and toilet paper).

AQ separation unit (1) separates as much as 98 per cent of fluids from solid waste without the need to use moving parts. The function is based on centrifugal force (protected by global patents). Solid waste is composted in a composting unit (2). An effective composting process reduces the volume of the waste by about 95%. The toilet produces humus, which is taken out 1 to 4 times a year (e.g. for model 3x200 every three months providing about 15 litres).

The fluid separated in the separation unit is further led to a denitrification unit (3), which removes 40 to 50 per cent of nitrogen from the fluid. This fluid corresponds to domestic wash and flush waters (greywaters).

The fluid is then led to the treatment tank of wash and flush waters and to a leach field.



# AQ Biological water closets

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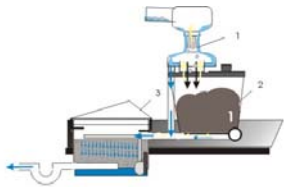
To the left AQ RANGE Capacity/Model/Price

To the right a single-family house (5 persons) with Aq 4x200 in use.

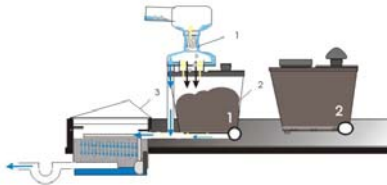
Separation unit and the composting unit in the basement.

Down nitrogen removal unit for the flushing water and the urine which are separated.

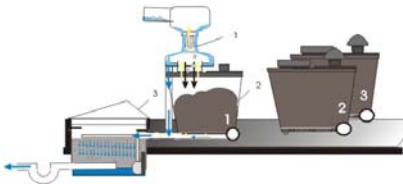
The nitrogen removal unit prepares the liquid for nitrogen removal in the precipitation tank and in the leach system which are also used for handling of the grey waters.



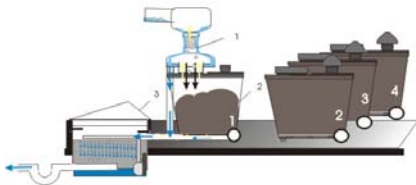
**AQ 200**  
200 uses



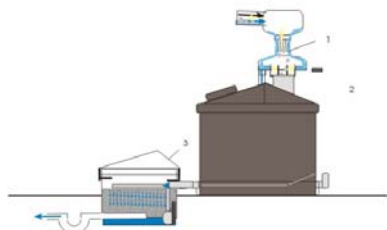
**AQ 2x200**  
500 uses



**AQ 3x200**  
800 uses



**AQ 4x200**  
1200 uses



**AQ 450**  
600 uses

