



Composting Toilets

Advantages of Composting Toilets

Water savings per year are estimated at 30,000–60,000 litres depending on the family size and flushing habits. (Although Australia is the driest inhabited continent, we have one of the highest rates of water use per capita.)

Composting toilets reduce the amount of waste that sewerage works have to cope with, and produce useful compost.

Available systems

There are basically three types of composting toilet systems available for sale in Tasmania. They all have council approval and range in price from about \$1000 to \$4000.

Large single bin systems sit under the house (e.g. Clivus Multrum, Enviro Loo) and are permanently attached to the toilet pedestal. Compost is shovelled out, small amounts at a time, from a trapdoor in the bottom of the bin.

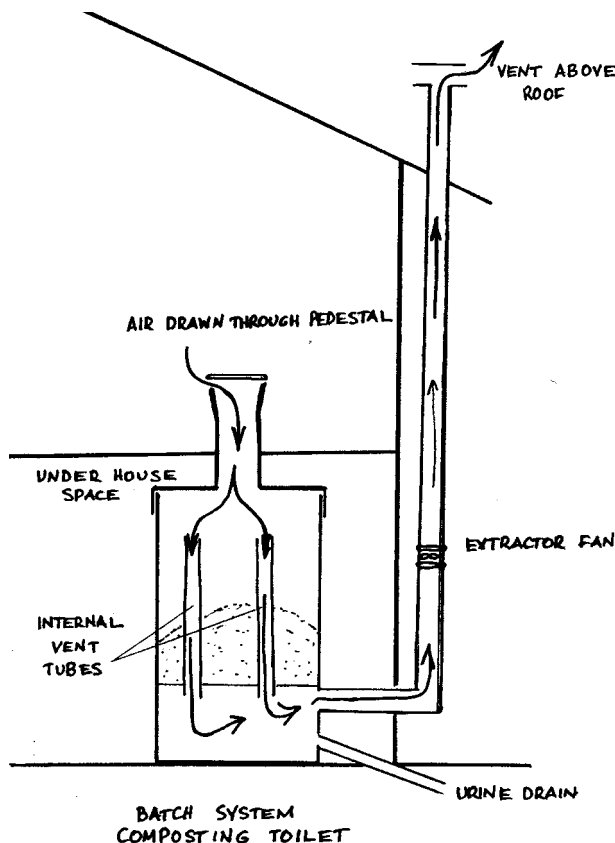
The multiple bin, or batch systems (e.g. Nature loo and Rota-loo) are also placed under the house. A full bin is replaced with an empty bin under the pedestal. When the full bin is completely composted it is emptied by tipping it upside down.

Small self-contained units (e.g. Biolet, Ecolet) sit on top of a floor. They are usually more technologically complex, with built-in heaters, thermostats and mixer blades to speed composting, and have small-capacity trays that slot under the pedestal.

The large single bin systems require about two metres under the floor of the house. The multiple bin systems generally need about one metre. The self-contained units do not need space under the house but are usually only suited to use by two or three people.

All systems need a small fan (12 volt) to draw air through the compost pile – both to keep it from getting too wet and to take composting smells to the outside.

A well-functioning composting toilet should not smell. Most under-house bin systems have a separate drain to take urine to a small absorption trench.



Things to consider

Some councils do not readily approve the use of composting toilets if the house is already connected to the sewerage system.

- There are plans available for building your own composting toilet systems (in the single bin or batch designs) but it may be more difficult to obtain council approval for them. (See books on composting toilets in the Environment Centre Library for plans.)
- The space under your house (at least the toilet area) will dictate the size of the bin and therefore the system you plan to use.

- Some systems are more technologically complex than others and need careful monitoring for water content and temperature so that heaters can be turned up or down.
- Batch systems may be heavy to manoeuvre, requiring two people to empty, but have the advantage of being able to complete the composting process elsewhere.
- Single bin systems may not be sited in the warmest place for composting (whereas a batch system bin can be moved to a warmer site to finish composting).
- Manufacturers usually produce different models to suit different situations – number of users, under-floor area etc.
- For building/plumbing approval, a licensed plumber may be required to carry out the installation work.
- The composting process takes 6–12 months and during that time all disease-causing pathogens should be killed but, to be on the safe side, manufacturers recommend that the compost is buried (but not in vegetable gardens).
Composting requires anaerobic bacteria, air, warmth, moisture (but not too much) and a balance of nitrogen (human waste) and carbon (sawdust, shredded card-board, dry leaves). Cooler composting systems can incorporate worms, but those that require higher temperatures cannot.
- Another consideration is what to do with greywater (from the kitchen, laundry and bathroom). Tasmanian councils do not approve the re-use of untreated greywater (see separate Sustainable Living Tasmania pamphlets on greywater treatment and rainwater tanks.)

Composting Toilet Suppliers

On-floor Systems

Ecolet

Manion Plumbing, 18 Invermay Road, Launceston 7248. Phone (30) 6334 0617
Loones Rural Services, 62 Bass Highway, Westbury 7303. Phone (03) 6393 2233

Biolet

Loones Rural Services, 62 Meander Vally Rd, Westbury 7303. Phone (03) 6393 2233

Batch systems

Nature Loo

Jocelyn Mansley, 71 Craythorne Rd, Rosevears Tasmania 7277.
Phone (03) 6330 1551

Rota-loo

Environment Equipment Pty Ltd, PO Box 988, Breaside VIC 3195. Ph (03) 9587 2447

Large bin systems

Enviro Loo

Manion Plumbing, 18 Invermay Road, Launceston 7248. Phone (03) 6334 0617

Clivus Multrum

Loones Rural Services, 62 Bass Highway, Westbury 7303. Phone (03) 6393 2233

For more information see:

- The composting toilet file and book collection in the Sustainable Living Tasmania Environment Resource Library
- Workplace Standards Tasmania, Plumbing, on the Department of Infrastructure, Energy and Resources DIER) website: www.dier.gov.au
- Websites for the composting toilet manufacturers
- www.howtocompost.org
- <http://www.greenhouse.gov.au/yourhome/technical/fs27.htm>

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