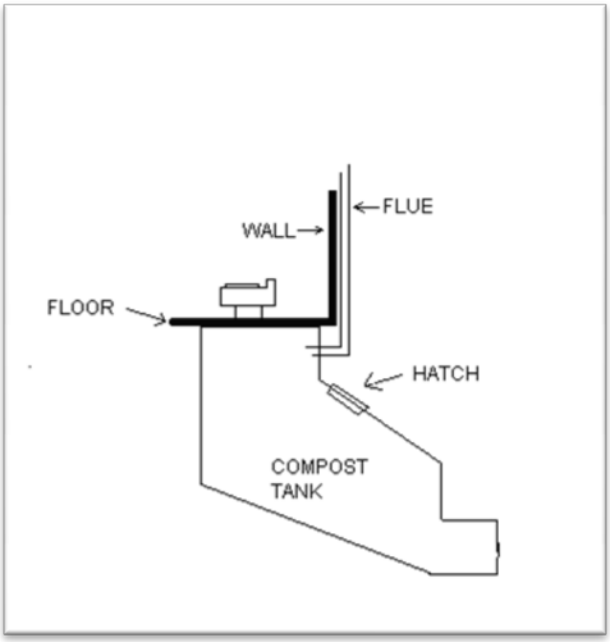
BILOO LOW FLUSH COMPOSTING TOILET PEDESTAL

A modern convenience, these great looking toilets flush with as little as 500mls of water, using a convenient foot pedal.

We use the well proven ceramic Sealand low flush pedestal. This product is used extensively in the United States on top of composting toilet systems and we have trialled it thoroughly with our systems, and in local conditions. (Height to bowl lip 435 mm / Bowl 387 mm wide / Length from wall 521 mm)

General Installation Diagram



The pedestal uses about half a litre a flush which is controlled by the pedal on the side. After each flush a small amount of clean water remains in the bowl bottom. Because the quantity of water used to remove the body waste is so small the pedestal and below floor vault must be close together horizontally (No more than a 45 deg angle away) but the pedestal can be on a floor upstairs, and two pedestals can be used with one vault. The amount of time the pedal is depressed governs the amount of water used.

Low Flush pedestals are suitable for private and commercial use and are available with 2 different vault sizes.

1. Small - 5 People daily use (vault: 1450 H X 1900 L X 1100 W)
2. Large - up to 50+ people for daily use (vault: 1.1M H X 2.2M L X .75M W)

All our composting toilet systems comply with or are better than New Zealand standards AS/NZS 1546.2.2001, and are made in conjunction with AS/NZS 1547. This means they also meet clauses B1 (Structure) , B2(Durability) , G1 (Personal hygiene) , G 14 (Industrial liquid waste) of the New Zealand building code.

General Installation

The toilet vault is best located in a sunny, well ventilated area that allows easy access for management and maintenance. In the most common situation the toilet is installed on flat ground. The warmer the vault is kept the better the composting process works. So it is recommended that the vault be insulated from the air and surrounding soil as much as possible. The system can be plumbed to tank or mains pressure water supplies.

Once the toilet is installed then the starter pile is added. The pile consists of layers or material which assists with aeration and fluid absorption. Additional materials need to be added periodically depending on use.

As the flue position and the inspection point has changed (access is no longer through the pedestal but now is through a hatch in the front of the tank under the floor), the addition of carbon material is via a hatch accessed from outside. Access to this hatch must be taken into consideration when installing the system.

Vault Position - This does not have to be directly under the pedestal but consideration has to be given to the fact that as only small volumes of water are being used to transport the waste to the vault. Only 45 deg bends or less should be used. The waste pipe from the pedestal must enter the vault in the area marked on the top of the alloy cap on top of the vault.

Hatch Access - Care must be taken that easy access to the hatch is maintained after instillation of the tank for the inspection of the pile inside and the periodic addition of bulking material. Keep hatch closed at all times when not in use.

Flue - The flue now comes out the side of the tank instead of the top of the pedestal. The flue can be 150 or 200 mm size as preferred and runs from the side of the tank up the outside of the building. A fan is essential with the low flush pedestal option. Where the flue enters the tank the flue needs to be cut at an angle as shown in the drawing below to stop the flue opening being blocked by waste falling from above.

Tank Drainage - As the system now has more water entering than it is capable of dealing with then we must consider the safe drainage of the fluid. The fluid drain at the bottom of the tank can be plumbed so the fluid goes to the grey water system where it is of benefit, or it goes to its own disposal field.

Maintenance

Composting toilets are not a use and forget system, they must be managed to work properly. This is not rocket science as the size of the BIOLOO systems allow for large parameters in management.

One of the most important rules of good composting is to keep the compost moist, porous and aerated, not compacted. To achieve this we add additional organic material called a bulking agent. This material can be any coarse organic material you have.

Small Bioloo Approx quantities: Peat - One 100 litre bag compressed / Bark chips - One 20 litre size bag / Compost - 3 to 4 20 litre bags as from garden centre or equivalent volumes of own compost

Large Bioloo Approx quantities: Peat - Two 100 litre bags compressed / Bark chips – 2 x 20 litre size / Compost - 5 bags 20 litre size or equivalent volume of own compost.

Pricing and Warranty

The system adds an additional $880 plus GST to our standard dry vault system which includes the Low Flush pedestal, a modified vault and upgraded fan.

The ceramic pedestal is warranted for 10 years for stains and discoloration and the mechanical parts for 2 years.