

Earth Tub overview

The Earth Tub is designed specifically for on-site composting of food-wastes. The Earth Tub is a fully enclosed composting vessel featuring power mixing, compost aeration, and biofiltration of all process air. This self-contained unit is ideal for composting at schools, universities, restaurants, hospitals and supermarkets¹

Key features

- Easy to operate
- Rapid process reduces volume quickly
- Heavy-duty plastic construction
- Minimal need for bulking agent
- Short time required for mixing/loading
- Temperature controlled system
- Insulated for cold weather operation
- Thorough compost mixing
- Biofilter odor control system

Quick Facts

- Cold weather: The Earth Tub has been installed in some very cold locations. It may need supplemental heat if the temperature remains below 10F for more than 7 days. *The aeration system should be shut down during cold weather.*
- The Earth Tub is capable of processing as little as 40 lbs per day or as much as 500 lbs per day.



¹ <http://www.compostingtechnology.com/invesselsystems/earthtub/>



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Earth Tub maintenance

Loading

- Organic materials are loaded through the large hatchway in the cover.
- Periodically, dry materials such as wood chips, shredded paper or shavings can be added to insure that porosity and moisture levels are ideal for composting.

NOTE: The Earth Tub is designed to process kitchen-prep waste and plate scrapings. Meats, cheese, and other fatty foods should be kept below 10% of the total waste.

Mixing

- The auger motor must be run and the cover rotated to properly mix the organic material inside the Tub.
- Two revolutions of the rotating cover are required to mix the outside and center of the Earth Tub. The auger will shred and mix a ton or more of compost in 10-15 minutes.

NOTE: A complete mix should take approximately 10 minutes, and should be performed at least two times per week.

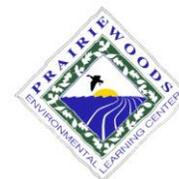
Active compost and odor control

- Maintaining aerobic conditions and controlling temperature are essential for composting and odor control.
- The aeration system draws air through the compost and forces the exhaust air through our biofiltration air purification system to remove odors.
- Liquids are collected and disposed to a sanitary sewer or holding tank.
- Once the Earth Tub reached capacity, no more additional food waste should be added for ~14 days once the Earth Tub has been filled.

Compost Collection

- Heat generated in the Earth Tub rapidly breaks down the food scraps.
- The volume reduction is typically 70% or higher.
- After 3--4 weeks of active composting, open the discharge doors and the auger pushes the compost out as it rotates past the discharge door.

NOTE: further information on collection and preparing end-use compost is available on the Earth Tub website.



IMPORTANT Earth Tub Installation

Site requirements

- For ease of use, the Earth Tub should be located near site of waste-generation i.e. cafeteria.
- Make sure the surface on which the Tub is placed has no rocks or roots that could damage the bottom of the Tub.
- A minimum of 24" clearance is recommended on all sides of the Earth Tub.
- There are specific electrical installation requirements, for the auger and blower motors, that would need to be evaluated and performed by a certified electrician.
- To properly drain the liquids, the Earth Tub has two drains – one at the base of the Earth Tub and the other at the base of the biofilter. The liquid from the Tub is collected in a 1" drain fitting on the 2" PVC lint. The installer will have to purchase additional 1" tubing or plastic pipe to connect to a drain.
- The loading height is 4ft. Some installation sites build a platform or stairs to reduce the lift height for loading food waste into the tub. The platform should be 12-14" in height. (see pictures below)



Pictured: the Earth Tub as it is currently installed at Carleton College in Northfield, MN. A standard shipping flat serves as the Earth Tub's base. Electricity is brought in from above. Drainage pipes funnel liquid to in-ground 5-gallon pail.