

*Firm:* [Clivus Multrum Inc.](http://www.clivusmultrum.com)  
[www.clivusmultrum.com](http://www.clivusmultrum.com)

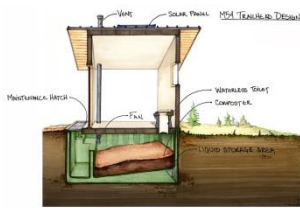
*System:* **Composting Systems**

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*Category:*



**COMPOSTING SYSTEM**



**Basic System**



**Full building system**



**Foam flush toilet**

*Process:* Waterless toilets or foam flush toilets eliminate water from the waste at its source. Carbon is added to the system, usually by adding wood shavings or other products to the toilet. A fan both pressurizes the system to avoid smells and aerates the wastewater to promote nitrification. Wastewater lands on an angled floor to aid slow separation of composted product from new influent. Liquid is drained, stored separately and pumped. An automatic moistening system is recommended for commercial and residential uses. The final product is removed and possibly used as fertilizer. Clivus Multrum offers a service that removes product and maintains the system.

*System:* Waterless or foam toilets, fan, properly sized tanks, and access for pumping and servicing. Plumbing separation of grey and black water is needed.

*Flow Range:* Adaptable to any size.

*Tests:* NSF/ANSI 41 for Dry Systems

*Cost:* \$5,000 to \$12,000

*Energy:* The fan runs continuously (60-80 watt), so the maximum cost is estimated at \$10.37/month.

*Tanks:* Polyethylene

*Venting:* Exhaust through house with fan

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*Footprint:* 100 SF, usually in the basement or a floor below fixtures

*Height:* 8 feet.

*Life Cycle:* Fan and pump 3-7 years (Cost:\$200)

*Warranty:* 1 year electrical components; 5 years for the tank

*Maintenance:* A service contract costs less than \$1,000/yr.

*Notes:* Suffolk County currently requires that a septic system also be available, which duplicates some system costs.

Is compatible with greywater systems for full recycling/reuse of wastewater.

*Installations:* Throughout the U.S.A., especially in remote locations.

*Treatment:* Removes 90-100% of the nitrogen from the onsite dispersal system. How the removed product is applied will impact watershed overall loading.

*Advantages:*

- Adaptable to site conditions
- Full recycle of nutrients
- Low energy use

*Disadvantages:*

- Change in behavior, as may require adding carbon daily
- May require duplication of system components due to local regulation
- Maintenance contract expensive