



**URINE DIVERTING
TOILET KITS**

**CUSTOM
SOLUTIONS**

**SERVICE
SUPPORT**

www.toilettech.com

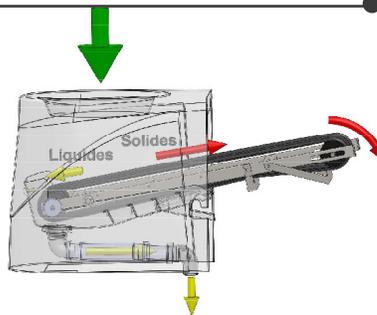
**TST TOILET TECH
SOLUTIONS**

URINE DIVERTING SEATS & KITS

Managing human waste at our most beautiful Parks, Forests, and protected places is challenging. Pit toilets pollute. Composting toilets fail. Helicoptering waste drums is expensive. These issues arise because urine and solid waste are conventionally mixed together. Instead, if urine is source-separated, prior to mixing, it can be discharged directly to soil for treatment. This eliminates 60-80% of the waste volume onsite. TTS's Behind-The-Wall (BTW) mechanical urine diverting conveyor is the best way to divert urine from solid waste. ToiletTech's turn-key kits use Penetrator™ earth anchors and a Floating Foundation, eliminating the need to excavate, and making permitting and construction a snap.

BTW SEAT

- > 99% Urine Diversion
- Stainless Steel
- Mechanical Foot-Flush
- Waterless
- No Bulking Agent
- Low O+M



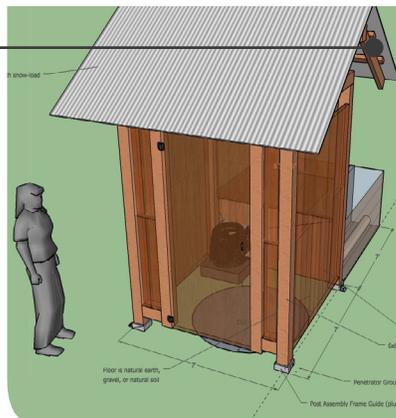
FULL TOILET KITS

CAMP-4

- 6" x 6" Cedar Posts
- 1" or 2" T&G Cedar Walls
- Snow Load Design

JOHN-WISHBONE

- Aluminum Frame
- Recycled T&G Wall Boards



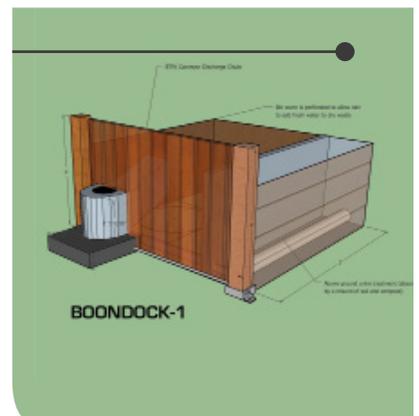
REMOTE TOILET KITS

WILDERNESS-3

- Wilderness Act Compliant
- Optional Door

BOONDOCK-1

- 10-20 years Waste Storage Capacity
- Very Remote Sites



WASTE MANAGEMENT

All TTS toilet systems divert urine away from solid waste. This waste diversion is the only ecologically sound approach. All mammals physiologically source separate their waste streams. Soil biology has evolved to process mammal wastes separately; bacteria oxidize minerals in urine and plants uptake the nutrients; while bugs and invertebrates consume the fecal matter, adding their own intestinal bacteria to the degraded waste for rapid decomposition and stabilization.

UNURINE TREATMENT

- Below Ground Septic-like Field
- Above Ground Pipe & Barrel Designs Possible
- Nutrient & Pathogen Reduction
- No Odor



B.C. Parks

SOLID WASTE TREATMENT DECOMPOSE

- Uses Native Bugs to Decompose Waste
- No Bulking Agent Required
- Pathogen Reduction
- Decomposition In 6-12 Months
- Low/No Odor



Raw Waste - 6 months of decomposition. Smith Rock State Park, OR

WASTE AWAY

- Waste Collected in Fabric Bags
- Variety of Bag Sizes from BagCorp.com
- Passive Drying Reduces Weight & Odor



Waste Away Bag, Strathcona, B.C.

INCINERATE

- Service Provided by TTS
- Requires Waste Away Design
- Onsite Batch Burning
- Best for Low Use Sites



Carmore Nordic Centre, A.B.



Baker Lake, WA (USDA)



Lago Capri, Patagonia

FEATURED SITES

- Camp Muir, Mt. Rainier National Park, WA
- Lago Capri, Patagonia, Argentina
- Glacier Bay National Park, AK
- Smoke Bluff Park, Squamish, B.C.
- Taylor Meadows, B.C. Parks
- Fern Lake, Rocky Mountain National Park, CO

Peer Review Publications

Hill GB and Baldwin SA (2012) Vermicomposting toilets, an alternative to latrine style microbial composting toilets, prove far superior in mass reduction, pathogen destruction, compost quality, and operational cost. *Waste Management* 32(10) 1811-1820.

Hill GB, Baldwin S, Vinneras B (2013) Evaluation of Solvita compost stability and maturity tests for assessment of quality of end-products from mixed latrine style compost toilets. *Waste Management*, 33(7), pp.1602-1606.

Hill GB, Baldwin S, Lalander C (2013) The effectiveness and safety of vermi-vs conventional composting of human feces with *Ascaris ova* as model helminthic parasites. *J of Sust. Dev.* 6(4).

Hill GB, Baldwin S, Vinneras B (2013) Composting toilets a misnomer: Excessive ammonia from urine inhibits microbial activity yet is insufficient in sanitizing the end-product. *J of Env. Mgmt* 119.

Hill GB and Henry GHR (2013) The application and performance of urine diversion to minimize waste management costs.... *International Journal of Wilderness Management* 19(1), 26-33.