

Mata Solids Separator

Mata is a single-family home appliance for high-quality blackwater treatment. Unlike bulky septic tanks that settle out wastewater solids, Mata uses a compact screening process to eliminate excavation and reduce cost. Mata pairs with existing grey water disposal practices to provide complete home sanitation.

Features

- Treats bathroom and kitchen blackwater.
- Remediates bacteria and nutrient loads.
- Excavation free, affordable installation.
- No Odor.
- Works with conventional bathroom and kitchen fixtures.
- Extends cesspool life and reduces pump outs.
- Wifi enabled for remote monitoring.
- Wood facades can be added to match home.



Technical Specifications

Dimensions | 28"H, 28"W, 51"L.

Weight | 125 Lbs (57 kgs).

Power | 120 V

Max Amps | 5 A

Normal Power | 20W

Heater Power | 200W (only on for solids sterilization)

Disposal Pump | 1/4 HP

Capacity | 6 Adults.

Material | LDPE, Fiberglass, PVC

Plumbing Connections

A. **Inlet** | 16" ϕ - 3" STD Pipe

B. **Vent** | 16" ϕ - 1.5" ϕ

C. **Treated Effluent** | 15" ϕ - 1" ϕ

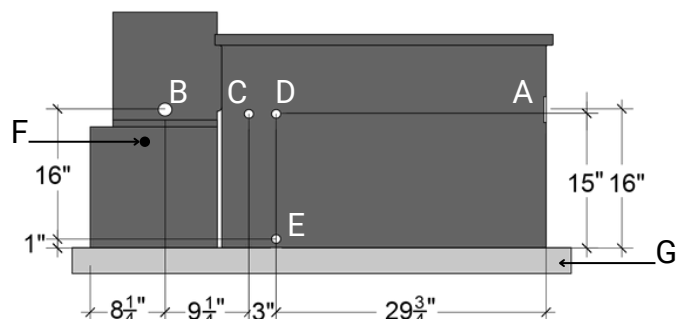
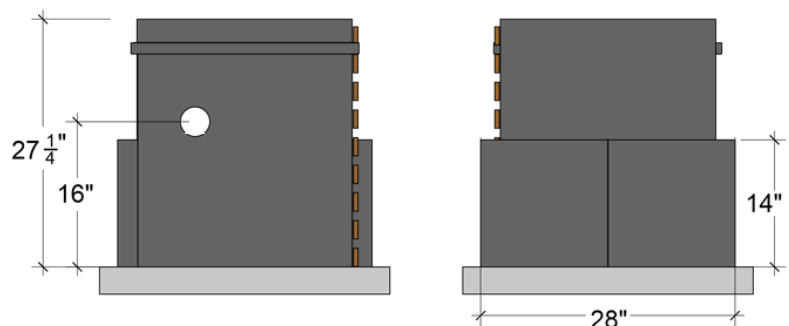
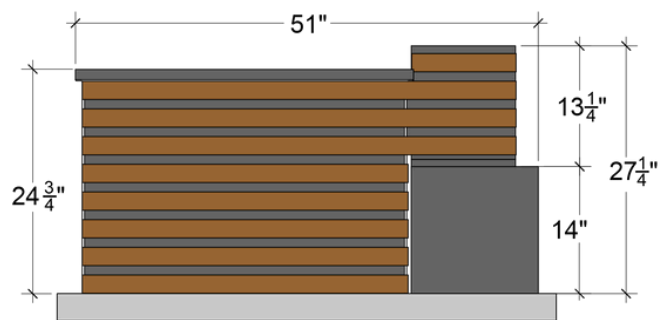
D. **Overflow Drain** | 15" ϕ - 1" ϕ

E. **Emergency Drain** | 1" ϕ - 1" ϕ

G. **Foundation** | 3" Slab Typical

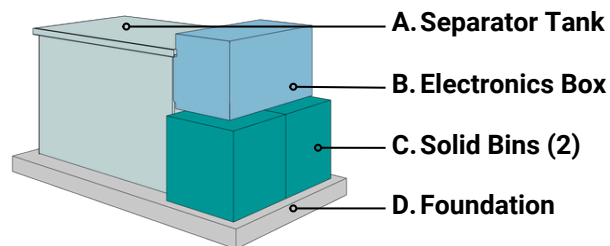
Certifications

Currently undergoing NSF 41 equivalent testing through the University of Hawai'i.



Product Components

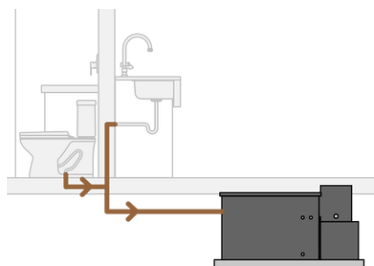
Mata separates solids from raw sewage and then dehydrates them for disposal. Inclusion of two solids bins allows one bin to be filling while the second is drying. The electronics box houses the smart-tech monitoring system; letting you know how the system is operating and when service is needed.



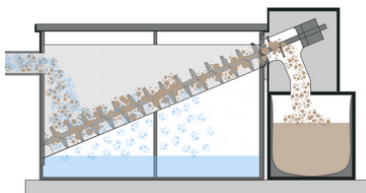
Included: 1x Separator Tank | 2x Solids Bins | 1x Electronics Box | Foundation Not Included

How Mata Works

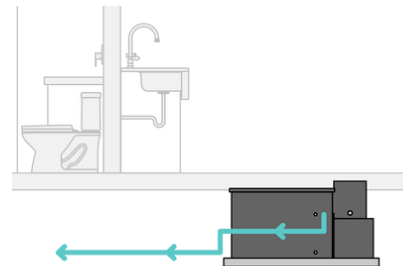
Blackwater flows into the Mata via the 3" inlet.



A screen separates solids while liquids drain to the bottom of the separator tank. An auger diverts solids to the solids bin for drying.



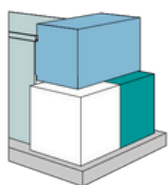
Separated liquids are pumped out via the effluent pipe to disposal.



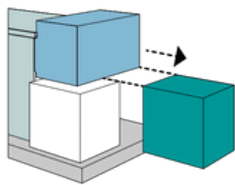
Solids Bin Exchange

Solids bin to be exchanged every 4 - 12 weeks.

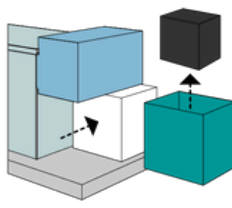
Empty Bin Weight: 10lbs (4.5 KG) || Dehydrated Solids Weight: 20 lbs (9 KG)



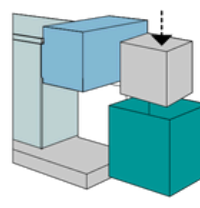
Mata runs for 3-6 months.



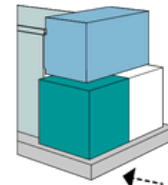
Remove solids bin with aged solids.



Withdraw aged solids.
Slide fresh bin over for aging.



Insert new solids bag.



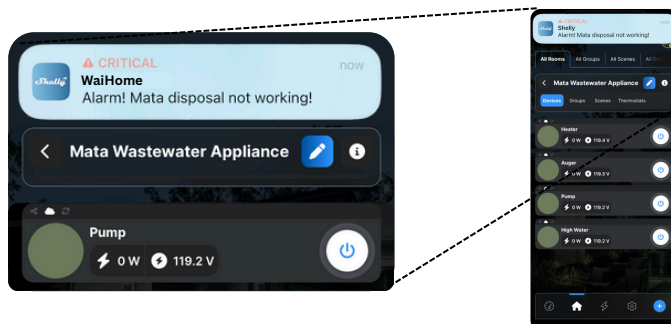
Position empty bin to receive fresh solids.

Mata Smart Features

Mata sends preventative maintenance notifications straight to your phone for:

- Pump and auger maintenance
- Intermittent solids emptying

Alternatively, subscribe to our maintenance program to have your system serviced and solids emptied by trained personnel.



2- Day Installation Process

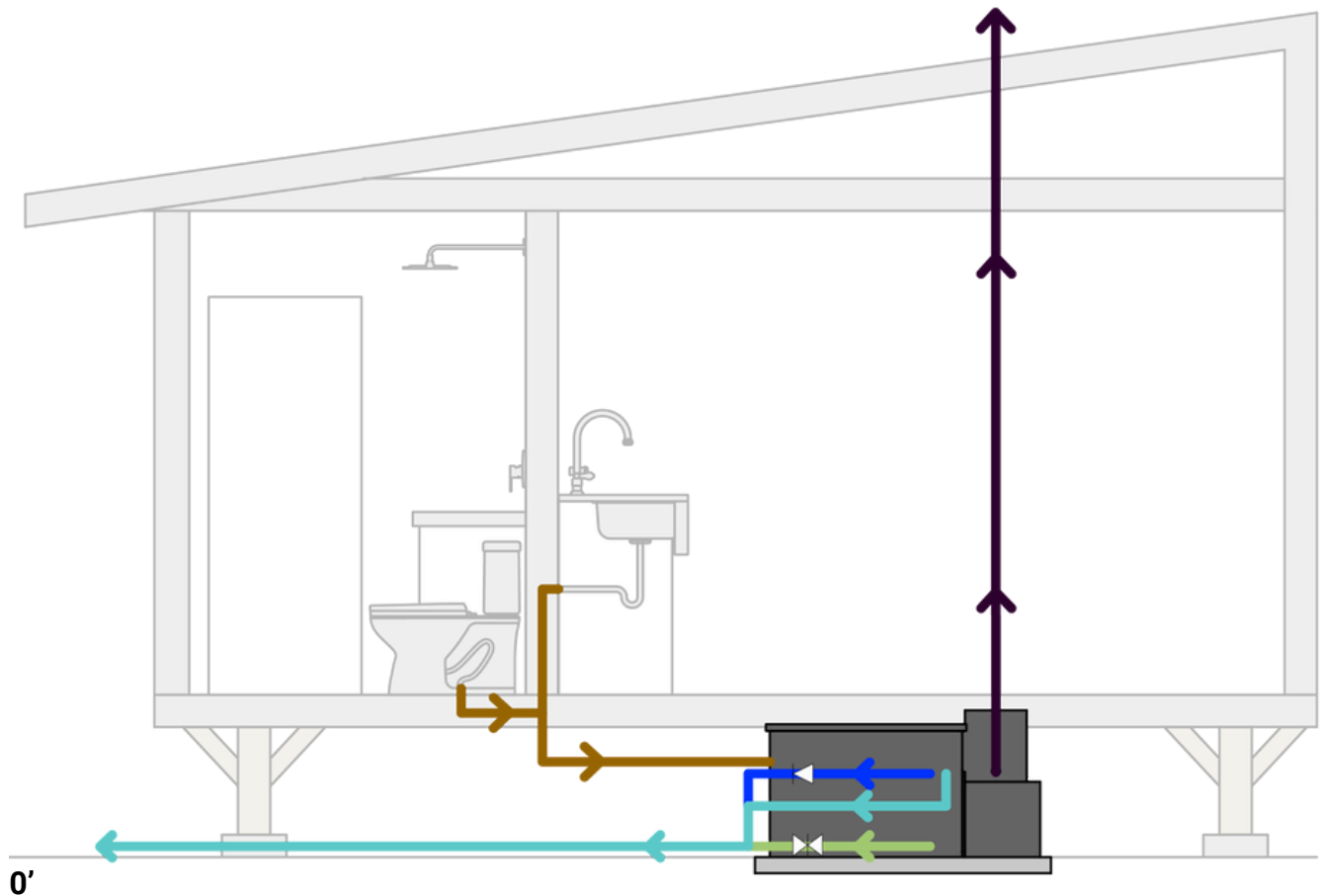
- Pour concrete slab.
- Source separate blackwater.
- Install Mata on blackwater line.
- Connect effluent, emergency drain, overflow ports to disposal area or further treatment.
- Install vent; Vent above roof line via existing or new vent stack.

Design Considerations

Position: Mata can be orientated perpendicular or parallel to house.

Clearance: 3' clearance required in front of solid bins for maintenance.

Other: All installations should conform to local regulation. Not for use in regions prone to freezing temperatures.



Treated Blackwater Characteristics

BOD5: 225 mg/L (80% Removal)

TSS: 160 mg/L (90% Removal)

TN: 210 mg/L (40% Removal)

FC: 2-Log Removal (5-Log with Disinfectant)

Loading

Capacity: 6 Adults

Max Flow: 90 gpd

Max Instantaneous Flow: 5 gpm

Plumbing Diagram

■ Vent | 1.5" Ø

■ Inlet | 3" STD Pipe, Gravity fed.

■ Overflow Drain | 1" Ø. Check valve, no shut off.

■ Pumped Effluent | 1" Ø. Route to disposal area.

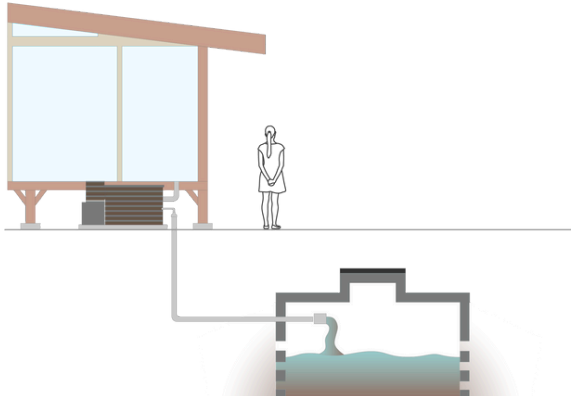
■ Emergency Drain | Gate valve.

Warranty

5 years for tanks. 3 years for all other components.

Use Cases

Mata is designed to fit the immediate needs of many homes. The following are examples of how the Mata can complement your home wastewater management.



Pretreatment for Cesspool Owners

Does your cesspool require frequent pump-outs? Are you concerned about the impacts of your cesspool on the environment?

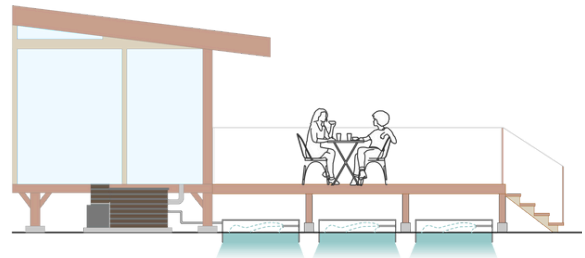
Install a Mata solids separator to protect your cesspool and the environment.

Complete Systems for New Development and Cesspool Upgrades

Are required you to upgrade your cesspool?
Are you building a new home?

We're working with regulators to allow you to install our complete aboveground solution:

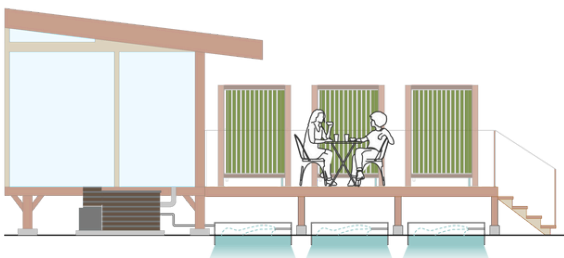
Install a Mata solids separator with Sawa liquid disposal.



Homes in Nitrogen Sensitive Watersheds

Are you looking for advanced treatment with additional dissolved nitrogen and organic removal?

Add the Passive Aerobic Treatment Unit (PATU) to your system.



Pumped Sewer Discharge

Is your community considering a liquid-only sewer collection network? Is your property downhill of a gravity sewer?

Install the Mata solid separator for reliable pumped liquid discharge to sewer.

