

Floating Treatment Wetlands System Data Sheet

“Proven and Cost Effective Wastewater Treatment System”

Martin Ecosystems manufactures floating treatment wetlands (FTW) for both municipal and industrial wastewater systems. Our Floating Treatment Wetlands technology is based on 10 years of international scientific research combined with biological processes that are centuries old. This allows us to meet and surpass the water treatment needs of communities and businesses, while also delivering a solution that provides value for money spent.

Product Description

Floating Treatment Wetlands (FTW) is a floating structure manufactured using 100% recycled polyethylene terephthalate, commonly referred to as PET plastic, the same plastic used to make drinking bottles. The PET fibers are bonded together forming a non-toxic, non woven fibrous matrix. The matrix layers are adhered together using a marine foam which provides the buoyancy for flotation. Plants are inserted into pre-drilled holes and grown hydroponically.

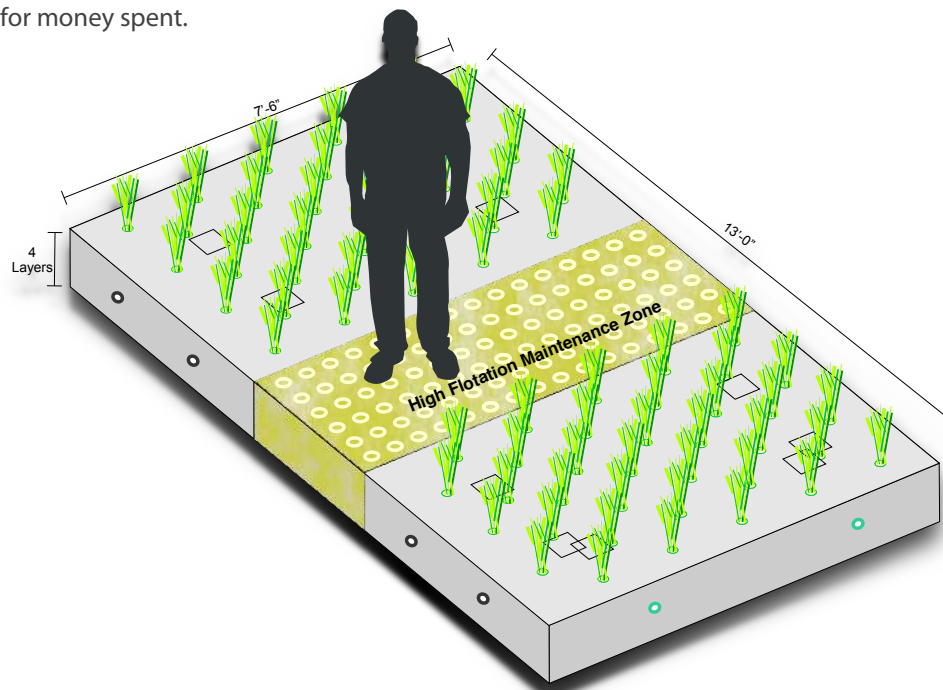
Size: 13.5'L x 7.5'W x 8"D

Material: PET plastic non-toxic, non woven fibrous matrix

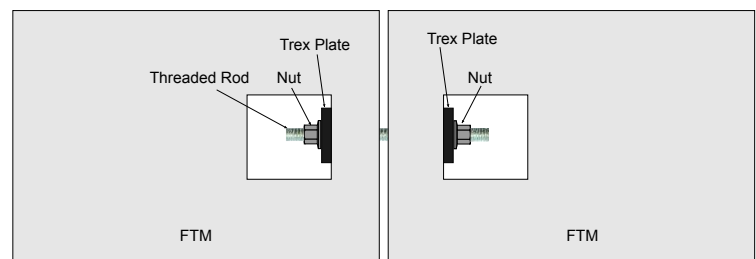
Buoyancy: High Flotation Maintenance Zone supports a 300# person.

Plant Holes: 65 plant holes with a 4" diameter

Connection: FTW modules are bolted to each at installation to create treatment rows



FTM Connection Detail



APPLICATIONS

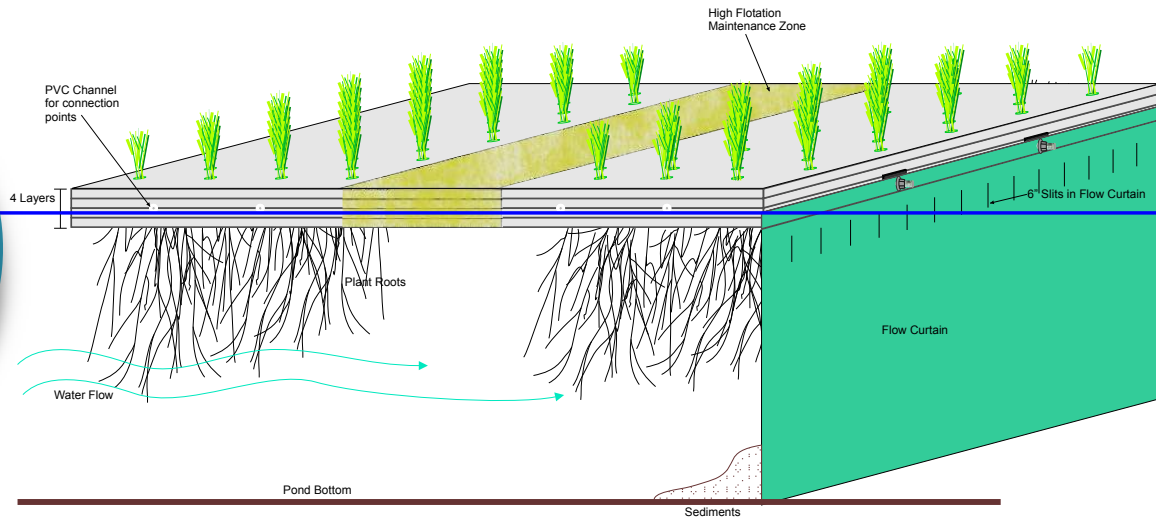
- Municipal Wastewater Lagoon Systems
- Industrial Wastewater Systems
- Stormwater Retention Ponds
- MS4 Stormwater Ponds

BENEFITS

- Zero Land Use
- Cost-Effective
- Low Maintenance
- Modular System

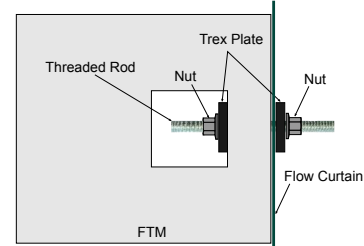
Green Initiative

- Polyester fiber used in our matrix material comes from 100% recycled PET plastic drinking bottles.
- 3 (16.9 oz) plastic bottles = 1 ft² of 2" thick matrix.



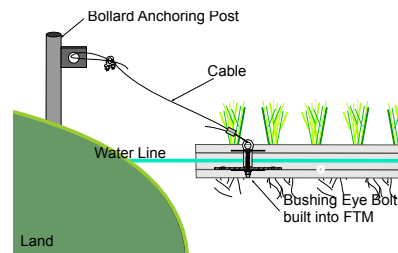
Flow Curtains are bolted to pre-fabricated connection points on the FTW to allow for the attachment of flow curtains or baffles which direct the flow of water, increase treatment retention time, drop sediments out of the water column.

Flow Curtain Connection Detail



Vegetation is selected based on reserve buoyancy required. Each plant should fit in the 4" diameter pre-drilled plant holes. Terrestrial plants are recommended such as wetland sedges, rushes, and grasses.

Anchoring or Tethering of the FTW is done by connecting the FTW pre-fabricated bushing with stainless steel cable to the bollard on the bank of the pond.



Treatment

Pollutant	Influent	Effluent	Removal Rates
BOD	265	<10	>95%
Total suspended solids (TSS)	265	<10	>95%
Ammonia (NH ₄ N)	45	2-5	>90%
Total nitrogen (TN)	55	<10	>85%
Total phosphorus (TP)	10	2-3	>70%
Fecal Coliforms	600	<10	