

Structural LivingWalls[™]

Sustainable, Strong and Green. Our customized designs, industry expertise and scientifically-tested GrowingMedia[™] are all a part of our commitment to your success.



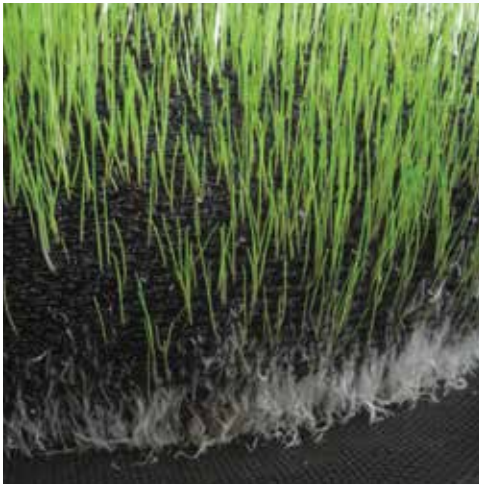
LivingWall Advantages

- Permanent slope stabilization that grows stronger over time-won't erode like concrete
- Choose vegetation that thrives in your climate
- No rain? Integrated irrigation system keeps walls looking great
- Minimize erosion while providing green space and a positive environmental impact
- LivingWalls can contribute to the LEED points of a project in several categories

Filtrex[®] Environmental Sustainability Benefits

Filtrex GroSoxx[®] uses **locally recycled organic materials** inside of photodegradable or biodegradable mesh. Diverting these organic materials from landfills and applying them to the soil means a reduction in greenhouse gas emissions. **For every 1,000' of 12" GroSoxx used, 160,000 lbs of organic materials are diverted and your carbon footprint is reduced by 307,000 lbs CO₂e.** This is the equivalent of offsetting the greenhouse gas emissions of **29 passenger vehicles** driven for one year. In addition, the potential water absorption equals up to **4,000 gallons, per rainfall event.**¹

GroSoxx® & GardenSoxx® Technology



Vegetation Choices

Examples of vegetation that may be selected include:

- Grasses, including natives
- Vines and groundcover
- Wildflowers
- Perennials and annuals
- Woody vegetation from live stakes or pots (2" or less so that grids are not cut in planting)

Filtrexx LivingWalls use GroSoxx and GardenSoxx as the basis for quickly establishing vegetation. These vegetated Soft Blocks™ use heavy duty Filtrexx tubular netting filled with certified, composted GrowingMedia™ to provide a stable and fertile environment for plant growth. The use of GroSoxx and GardenSoxx for wall infill speeds construction, eliminates waste, and prevents weeds from taking root. This system provides the highest amount of facial growing material in each application, maximizing environmental benefits.

LivingWall Components



Strapping is used in EnviroBloxx, EarthBloxx and Trinity Systems to create a mechanical connection between the fascia and substrate.

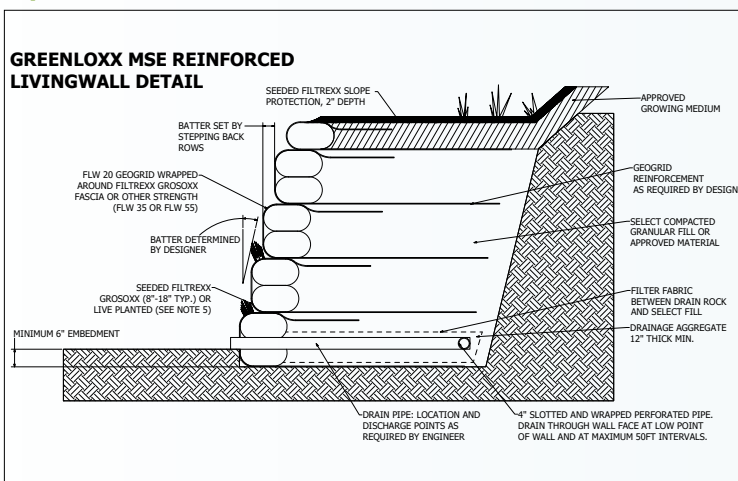


FLW Geogrid is bidirectional and secured with soil anchors. The standard 2"x2" opening eliminates cutting the grid for planting. Multiple geogrid strengths are available.



All Filtrexx LivingWall systems are designed with built-in irrigation to ensure good seed germination and long-term plant health.

Specifications & CADs



- Visit our library of specifications and CADs for all LivingWall applications at www.filtrexx.com/specifications
- View several designs for each system and then download your favorites
- Contact us with questions or for design assistance at (314) 287-4470 or email us at livingwalls@filtrexx.com

1. EarthBloxx® LivingWall



BEFORE

EarthBloxx modules are wet-cast concrete, providing superior dimensional consistency, which facilitates rapid installation by reducing the need for shimming during the stacking process. Wet-cast production also provides superior freeze/thaw characteristics.

MSE	Materials	Slope*	Height*
✓	GroSoxx® Fascia Block Straps	50-70°	No limit



INSTALLATION

- High structural stability
- Innovative design ensures longevity
- Fewer blocks and 50% less concrete
- Large pockets maximize growing space
- Polymer liner inside trough ensures moisture and mechanical connection to reinforcement
- Irrigated easily and economically



AFTER

*Wall slope & height determined by site conditions and engineering.

2. EnviroBloxx® LivingWall



EnviroBloxx is a radically unique, lightweight LivingWall system that brings a new level of ease and efficiency to DIY homeowners and professional landscapers.

MSE	Materials	Slope	Height
✓	GardenSoxx® Fascia Block Straps	70°	up to 5 ft



- High structural stability
- Made from 100% recycled plastic
- Easy to transport and install
- Lightweight—only 3 lbs per unit
- Fewer blocks—covers 1 sq ft per unit
- Customizable layout and vegetation
- Irrigated easily and economically



3. Trinity® LivingWall



The galvanized wire facing elements of the Trinity LivingWall System allow for mechanical connection and reinforcement while providing structure and containment of GrowingMedia (inside GroSoxx) at the face of the wall.

MSE	Materials	Slope*	Height*
✓	GroSoxx® Wire Fascia Straps Connectors, Struts	45-80°	No limit



- Structural integrity of wire wall system
- Proven success of Filtrexx Bank Stabilization technology
- Wire face panels available in both 3-ft and 10-ft widths
- Mechanical connection to reinforcement
- Irrigated easily and economically
- 70° panel alignment provides consistent setback & efficient installation



*Wall slope & height determined by site conditions and engineering.

4. GreenLoxx® MSE LivingWall



GreenLoxx MSE permanently stabilizes eroded or damaged slopes by using vegetated GroSoxx instead of concrete blocks—the walls are mechanically stabilized by wrapping FLW Geogrid around GroSoxx and into the embankment.

MSE	Materials	Slope*	Height*
✓	GroSoxx® FLW Geogrid	up to 80°	10 ft +/-



- Withstands high flow velocities—ideal for sensitive riparian areas
- Safer & more flexible installation than block walls
- Install individual (palletized) GroSoxx or continuous lengths
- FLW Geogrid reinforcement
- Irrigated easily and economically



* Wall slope & height determined by site conditions and engineering. Generally unlimited height however larger applications are more efficiently built with the Trinity system.

5. GreenLoxx® Non-MSE LivingWall



GreenLoxx Non-MSE allows for the stabilization of eroded or damaged slopes, riparian waterways, and shoreline banks while creating attractive, vegetated landscapes without the use of hard materials such as concrete and steel. FLW Geogrid is wrapped over the GroSoxx and secured with soil anchors.

MSE	Materials	Slope	Height
No	GroSoxx® FLW Geogrid Soil anchors	up to 50°	N/A

- Lightweight components
- Minimal base preparation required
- Minimal excavation; no backfill required
- Immediate protection from toe cutting & sloughing
- Establish and reinforce vegetation under intense hydraulic pressure
- Drains freely, less hydrostatic pressure
- Irrigated easily and economically
- Flexible design options available

Our LivingWalls are designed for environmental benefits.

Compost-based LivingWalls can have a significant impact on your project's sustainability.



LivingWall Benefits¹

- Reduction of the Urban Heat Island Effect
- Improved Exterior Air Quality
- Noise Reduction
- Increased Green Space, Biodiversity and Habitat
- Forage for Native Pollinators
- Urban Agriculture
- Onsite Wastewater Treatment
- Improved Health and Well-Being
- Aesthetic Improvements
- Local Job Creation



Carbon Footprint Reduction²

There are three key ways in which compost-based LivingWalls can significantly lower a site's carbon footprint:

- Methane avoidance resulting from diverting organics from landfills
- Carbon sequestration by permanent vegetation
- Carbon sequestration by storing carbon in the soil

This GreenLoxx MSE LivingWall on the Chattahoochee River has the following impact:

- 656,000 lbs of Organics Diverted from Landfills
- 1,148,000 lbs of CO₂e Methane Avoidance
- 205 lbs of CO₂ Sequestered in Vegetation
- 110,700 lbs of CO₂ Sequestered in Soil

This is the equivalent of offsetting the greenhouse gas emissions of 121 passenger vehicles driven for one year.¹



Treating Stormwater Runoff²

With approximately 50% organic matter, a high porosity, and high relative surface area, compost has the ability to absorb significant volumes of water.

This EarthBloxx LivingWall in Washington, D.C. not only provides habitat and beauty, it is also used for stormwater treatment. This system was designed to allow stored runoff water to be pumped through irrigation in the wall, allowing plants to transpire the excess, stored runoff.

Replacing a traditional concrete block wall with a permeable LivingWall on a site with a stormwater retention basin or bioretention system, may allow engineering and construction of a smaller stormwater retention basin or bioretention system, and/or increased absorption of area rainfall, and may also contribute to LEED Green Building Credits. Each linear ft of 12-in GroSoxx (1 square foot of LivingWall) can absorb up to 4 gallons of water.

Sources: ¹Green Roofs for Healthy Cities, "About Green Walls". ²Filtrex TechLink Research Summary #3335.

SiltSoxx™ are in compliance with most state & federal agencies including:

