

LivingWall Stormwater Absorption

Vertical Stormwater Treatment

With approximately 50% organic matter, a high porosity, and high relative surface area, compost has the ability to absorb significant volumes of water. Data extrapolated from published University research shows that each linear ft of 12 inch diameter Soxx (which equates to 1 square foot of Living Wall) with GrowingMedia compost can absorb up to 4 gallons of water.¹

This information may be used to determine the potential volume of rainfall absorption and resulting stormwater runoff reduction, or the volume of captured stormwater that can be treated or used as irrigation if applied to the Filtrexx Compost-Based Sustainable Management Practice. Each of these scenarios could be extremely beneficial in drought prone or water restricted areas, or where green infrastructure or green building programs have been implemented.¹

Replacing a traditional concrete block wall at the site of a retention basin with a permeable Living Wall may allow for engineering of a smaller retention basin and/or increased site absorption, and may also contribute to LEED Green Building Credits.

Increasing Permeability

Francis Caden Parkway, Pennsylvania



This GreenLoxx® MSE Living Retaining Wall was built for a roadway repair project that increases permeability and green space compared to a concrete block wall. This 2,400 facial square foot wall utilizes 3,300 linear feet of Filtrexx® 12" GroSoxx® filled with Filtrexx CertifiedSM GrowingMedia™.

This wall has the potential to absorb 13,000 gallons of rainfall, per event.¹

Treating Stored Runoff Water

Shorewood, Wisconsin



This GreenLoxx MSE LivingWall, stabilizing a bluff on Lake Michigan, not only provides habitat and beauty, it can also absorb significant amounts of stormwater.

Each linear ft of 12-in GroSoxx (1 square foot of LivingWall) can absorb up to 4 gallons of water. Utilizing 2,000 ft of 12-in GroSoxx, this wall has the potential to absorb up to 8,000 gallons of rainfall per event.¹

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