

Green Solutions for a Changing World



Conservation

Water Conservation

Using our patented, proprietary and unique combinations of technologies, we can reduce the water needs of natural grass, plants and trees by 50% to 85% over conventional sprinkler and drip systems. The ability to reuse grey water or condensation from air conditioning units as irrigation water further increases savings.

Energy Conservation



EPIC is a passive subsurface irrigation and drainage system which uses capillary physics and gravity to deliver water and nutrients to the plants and move water through an interconnected series of chambers and pans. The low pressure and greatly reduced water volume means less energy is needed to move the water. The EPIC system also reduces water usage and reduces heat islands, which can result in significant energy savings.

Sustainability and Reuse

Urbanization Minimization

Generally, as much as two-thirds of a community's domestic water supply is used for irrigation purposes. Therefore systems that capitalize on using free captured rain water for irrigation needs can produce substantial savings, in terms of the size and volume of water treatment as well as delivery structures needed for new communities. Rehbein systems are designed to maximize savings by incorporating stormwater management as a function of on site capture, storage and pretreatment, enabling reuse as irrigation water. This reduces (and in some climates totally eliminates) the infrastructure costs of building storm catch basins, drains, downstream embankment reinforcements and flood control structures.

“Brownfield” Use



The EPIC system seals or “caps” contaminated land with a liner, eliminating ground water infiltration. With this system, previously unusable “brownfields” can be used for golf courses and driving ranges, soccer fields, or parking lots without the expense of soil removal. The EPIC system is versatile enough to allow for the possible treatment of certain leachates.

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Pollution Control

Water Pollution



Rehbein uses permeable pavers, the EPIC system, the Mueller™ Green Roof or any combination of these to reduce water pollution. All water is sand filtered at the site to remove particles. Soluble pollutants such as nitrates and phosphates are used up as nutrients by the growing plants. Organic pollutants from vehicle drippings are absorbed and decomposed in the biological environment. Grey water, previously released to public sewer systems, can be treated on site and reused for irrigation without any public health concerns.

Our permeable pavers are recognized by the U.S. Environmental Protection Agency as a Best Management Practice suitable for improving stormwater quality.

Air Pollution

Rehbein technologies and products allow even the most water deficient geographies to implement green solutions, thus reducing carbon dioxide and other pollutants caused by the “heat island” effect of hard surfaces typically used in these environments.

Noise Pollution

The Mueller™ Green Roof reduces noise pollution by substituting soft, noise-absorbing material (vegetation) for asphalt and concrete.

Water Management

Stormwater Management

Rehbein’s EPIC system leverages the laws of physics and landscaping to automatically allow for our unique and patented filtration and storage system to clean and store water that would otherwise runoff or evaporate.

Permanent Erosion Control

The use of combined or stand-alone EPIC system, permeable pavers, and Netlon™ reflex mesh elements, in addition to other existing technologies can permanently mitigate existing erosion problems caused by sloping terrain, water volume and speed, and erodable soils.

Look for future complementary systems from Rehbein including retaining and sea walls.

Rehbein
ENVIRONMENTAL SOLUTIONS
INTERNATIONAL

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