

Evaporative Control Systems, Inc.

TOLL FREE (877) 608-2615

ORDER NOW!

A superior subsurface irrigation
and drainage system

HOW IT WORKS

ATHLETIC FIELDS

HOME

FLASH
DEMO

BROCHURE
REQUEST

GOLF

Home
Garden Kit

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Many people would be surprised to know that the vast majority of water provided through traditional sprinkler systems end up in the neighborhood gutter or floating back up to the skies.

The ECS system is based on a revolutionary but surprising simple concept. Provide an extremely efficient way to collect all water, and store it safely below the ground.



No more broken sprinkler heads, and wasted water.

Here's how it works.

A subsurface irrigation system is installed below the surface of the lawn or garden. Any runoff water (from rain gutters and drains is funneled to a storage reservoir below the ground). Plants, flowers and lawn are then watered from below the surface of the ground. The end result is an extremely efficient system of irrigation.

The benefits:

- A dramatic decrease in the amount of water needed to irrigate lawns and gardens.
- Healthier, happier plants and flowers
- Eliminates the needs for troublesome and in some cases, dangerous, sprinkler heads.
- Ability to fertilize from below the ground!

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Here is the more scientific explanation
of the ECS subsurface irrigation and

drainage system:

The Capillary Zone

Ten to 12" above the
3" deep saturated
zone reservoir lies
the Capillary zone
that provides an ideal
matrix for root
growth. A water film
is constantly



For a larger view of this slice view, [click here](#).

available around the sand grains, with the remaining void space occupied by air (oxygen). Root hairs during the growth phase prefer this environment to initiate water and nutrient absorption, and soil microorganisms prefer this aerobic environment for eventual decomposition of dead organic matter.

The Transpiration Zone

This overlapping layer extends from the tip of the deepest root in the capillary zone to the top of the highest leaf tip of any growing plant. This is the active pumping action system within the plant that not only delivers water and nutrients to all plant tissue during the growth phase, but also regulates plant health by regulating the turgor pressure and temperature within the leaf through evaporation. The rate of transpiration is directly proportional to the surface area of the plant, the growth rate of the plant, the ambient temperature, wind velocity, and humidity in the growing environment. As such, since the plant itself determines the water needs for sustained growth, a reliable water irrigation reservoir and capillary

zone must be available at all times. ECS is the only subsurface irrigation system that provides this reliability with simple, maintenance and worry free components.

The Chamber

The indestructible double walled chamber allows gravity to direct the water flow pattern throughout the unit structure and sequentially to adjoining units through the 2" connection/transfer pipes.