

Kapillary Irrigation Sub-Surface System (KISSS™) is the new generation irrigation technology providing intelligent water saving solutions for landscapes. KISSS, installed underground, moves water upwards and outwards to the root zone at the soils natural absorption rate, effectively wetting large areas of soil with even distribution.

Trend towards Conservation and Sub-surface Irrigation

There is a strong and growing recognition that we can no longer irrigate our landscapes by simply throwing water in the air and hoping enough eventually reaches the root zone of our plants and turf. Why is there a trend towards conservation?

- A Global Water Crisis. Only 2.5% of the world's water is fresh water. 70% of that is frozen in the polar icecaps. Climate change, degraded water quality and the deterioration of the water infrastructure all drive the need to find a way to use our water resources more intelligently.
- The significant droughts throughout the United States in 2011 have caused officials in Florida and Texas to declare water emergencies and limit water use in their jurisdictions.
- To conserve water, parts of Australia have disallowed overhead irrigation, and Edmonton, Alberta is considering legislation to mandate sub-surface irrigation only.
- California, through AB 1881, restricts the use of rotors within 24" of a hardscape, driving sub-surface implementation.
- A recent study in Australia proved KISSS to be at least 50% more efficient than standard drip.

KISSS Advantages over Drip

All subsurface is not created equal. Standard drip works well on the surface of planted beds, but performance suffers when placed underground in turf or below the surface in plantings.

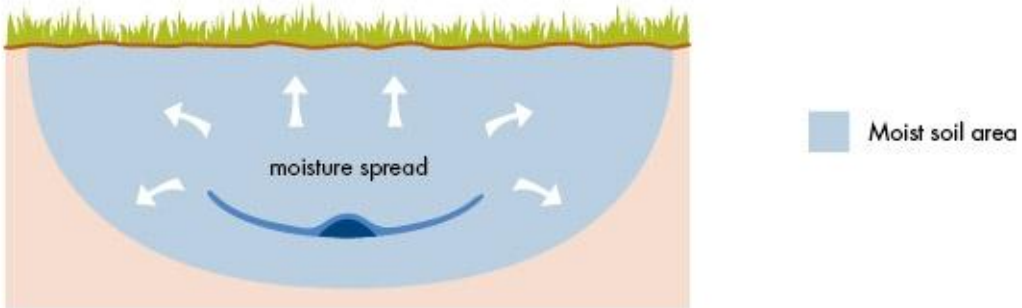
- Emitters of standard drip force water into the soil at a predetermined rate, causing tunnelling to the surface downward percolation, creating uneven wetting patterns. The geo-textile fabric of KISSS provides one contiguous emitter, allowing the soil to take the water at a natural absorption rate, creating an even wetting pattern.
- KISSS is buried 6-8" below the turf or planting area. This provides a greater water reservoir to support plants and turf, and removes unsightly drip lines from the surface of landscapes where they are subject to damage.
- The Toro Times Autumn 2009 Edition stated, "Importantly, KISSS uses less water than drip irrigation, and significantly less than sprinkler systems."
- Root Intrusion is a major concern with drip irrigation when deployed sub-surface.
 - Toro uses a chemical solution with the DL2000® with Treflan®, which is perceived as environmentally unfriendly.
 - Rainbird XFS Copper Shield embeds copper in their emitter to discourage roots.

KISSS employs multiple physical barriers to root intrusion; the dispersion tape covers the emitter, while the geo-textile fabric provides a water source for the roots to settle on. When properly scheduled and maintained, the KISSS material provides a powerful deterrent to root intrusion.

Call to Action

Irrigating using the same old, inefficient overhead rotors is no longer sustainable. Irrigating sub-surface, directly to the root zone is far more efficient; and KISSS is the most efficient sub-surface system. Learn more: Contact KISSS America today at Savewater@KISSSUSA.com or 1-800-376-7161

Below Flow Wetting Pattern



Comparisons of KISSS and Sub-surface Drip Wetting Patterns



Because every drop counts.
Contact KISSS America today at
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