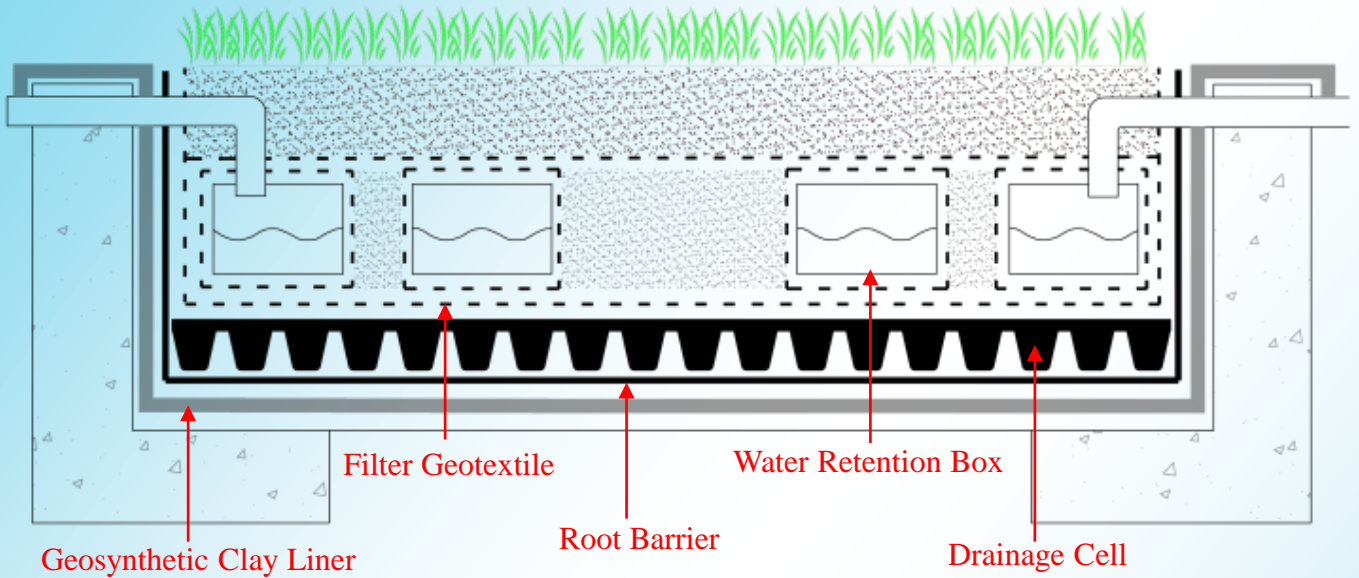


Zero Irrigation System



Zero Irrigation System (ZIS) is now a sustainable system combining rainwater harvesting and urban drainage for landscaping sub-soil moisture nourishment. We devise applications and supply a wide range of geosynthetics that form the basic components – filter geotextile, root barrier, drainage cell, water retention box and waterproofing geosynthetic clay liner.

Filtering Layer – Geotextile

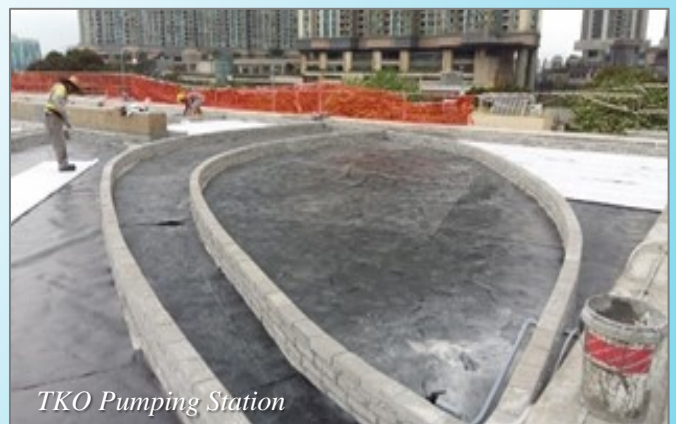
BontexGeo *Bontec NW6*

Geotextile is a permeable non-woven type synthetic textile material. Geotextile allows water to pass through but not soil. It prevents planting soil and sand from getting into the water retention boxes and the drainage cell at the invert. It is a light weight fabric, easy to handle.



Root Barrier – Solmax *HDPE Membrane*

Root barrier is an impermeable membrane, which inhibits root growth from affecting building structures, interfering utilities, damaging waterproofing system and retains moisture from leaching away. HDPE geomembrane is such an impenetrable layer to controls root migration. It is light weight, flexible, durable, and inert to the environment.



Drainage Cell – Global Synthetics

Hydrocell

Drainage cell is a thick rigid plastic drainage core panel that supports extreme loading and provides high transmissivity, suitable for invert draining in planting area, complimenting Zero Irrigation System and water retention application. A geotextile will keep fine from getting into the core.



Water Retention Box - Global Synthetics

ProTank

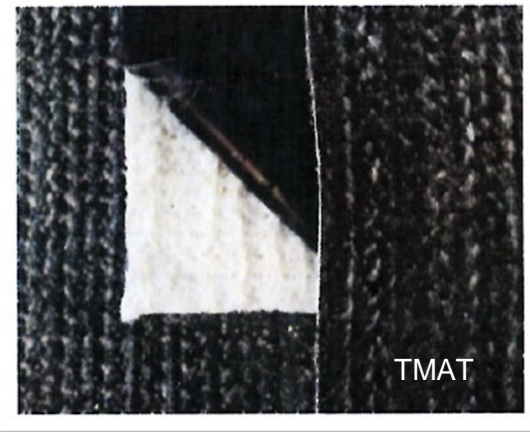
Water retention box is a unique modular subsurface drainage system, occupying space within the soil, to harvest and store water, which can be reused for sub irrigation. It comes in panels that can be assembled into standard size boxes. A geotextile is needed to wrapped around the boxes, there from, sand and soil can be placed around the box forming an empty water storage compartment.



Geosynthetics Clay Liner – ZhonglianGelin

TMAT

Sodium bentonite can be encapsulated between two layers of geotextile to form a waterproofing membrane, a geosynthetic clay liner (GCL). It is at the base of the ZIS planting area essential to supplement the concrete waterproofing system to prevent water harvested from leaking away. It also cushion any waterproofing lining.



We are able to provide liaison with architects on technical details, shop drawings, mock-up sampling, installation methodology and site assistance. Check with us on specification, price, stock and delivery.



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