

100%
Recyclable



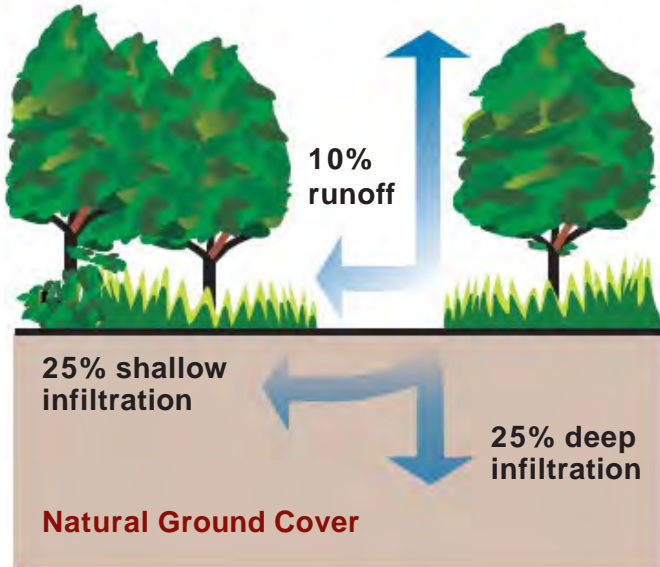
The Innovation, Your Solution

FlexaTank sub-surface water infiltration storage tank provides an efficient, cost effective and ecologically sustainable solution for stormwater management. It reduces stormwater discharge volumes, provides at-source filtration of run-off, and allows harvesting of rainwater.

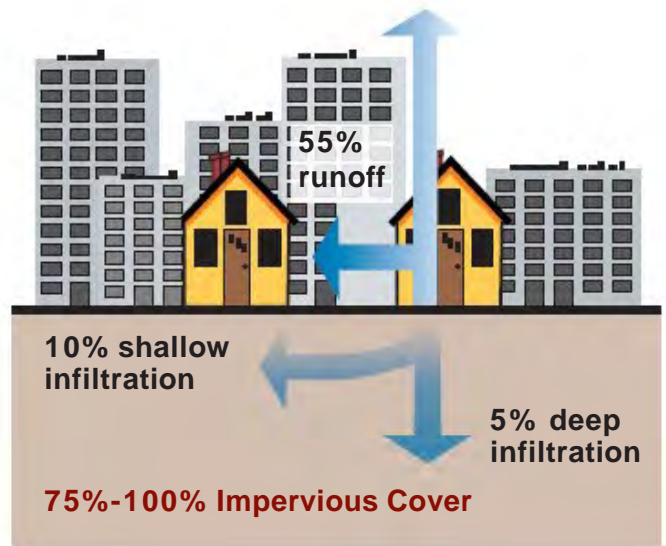
FlexaTank

FlexaTank offers architects, engineers and property owners an efficient and cost-effective method to reduce stormwater run-off in urban environments.

40% evapotranspiration



30% evapotranspiration



Source: U.S. Environmental Protection Agency, Washington, D.C.

Rapid urbanisation and industrial development have generated large areas of impervious surfaces such as roofs, roads, car parks and concrete surfaces, with a corresponding reduction in permeable surfaces such as forested land and grass fields.

Stormwater run-off that previously infiltrates into natural permeable surfaces now flow off impervious surfaces in urban areas. The water is directly conveyed via drainage systems consisting of open channels and pipes to storage or discharge outlet points.

What is FlexaTank?

FlexaTank is a high strength modular stormwater infiltration or storage tank made from recycled polypropylene designed as an at-source system for management of rainwater from roofs and other impervious surfaces.

It can be conveniently installed beneath existing or in conjunction with the construction of open ground areas such as parking areas, driveways, bio-swales, rain gardens, playgrounds, sports fields and parks, allowing these surfaces to remain permeable.

FlexaTank is available in several sizes and installation may be configured in multiple layers to suit the specific requirements of a residential house, parks or large commercial or industrial developments.

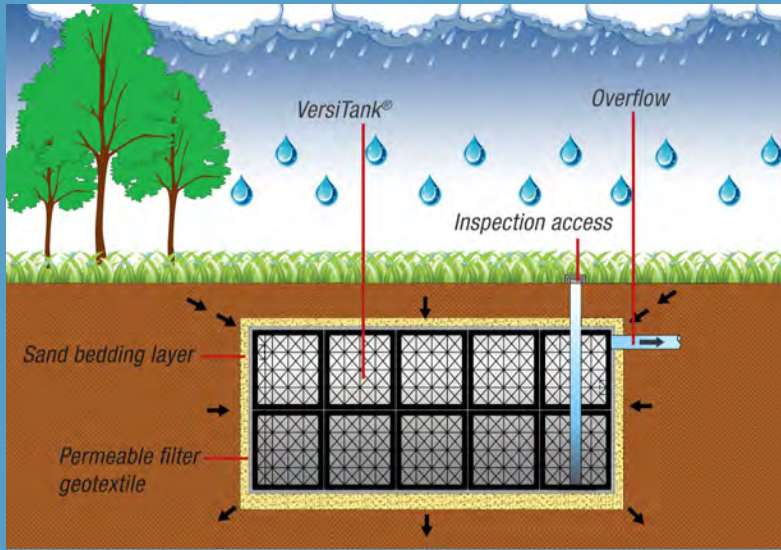
The removal of natural permeable surfaces creates two challenges in managing stormwater run-off in urban areas: **pollution control** and **stormwater surge**. Conventional drainage systems are typically not designed for at-source pollution control before the water is discharged into drains, streams, lakes and reservoirs.

Changing weather patterns have also led to higher frequency of stormwater surge around the world, and conventional drainage systems are often unable to cope with the substantially increased volumes, resulting in down-stream flooding and higher degree of pollution.

Advantages

- High compressive strength allows use under trafficable areas
- Interlocks vertically and horizontally for maximum stability
- Low storage and transportation cost
- Caters for all volume requirements
- Easy assembly of panels and installation of units
- No surface water storage hazards
- Contributes to achieving LEED SS, WE and MR credits and BCA Green Mark points

FlexaTank Infiltration System



FlexaTank units enveloped with a filter fabric, allows rainwater to percolate through the filter into the tank below whilst ensuring that solids, including mud and clay are filtered and prevented from entering the tank.

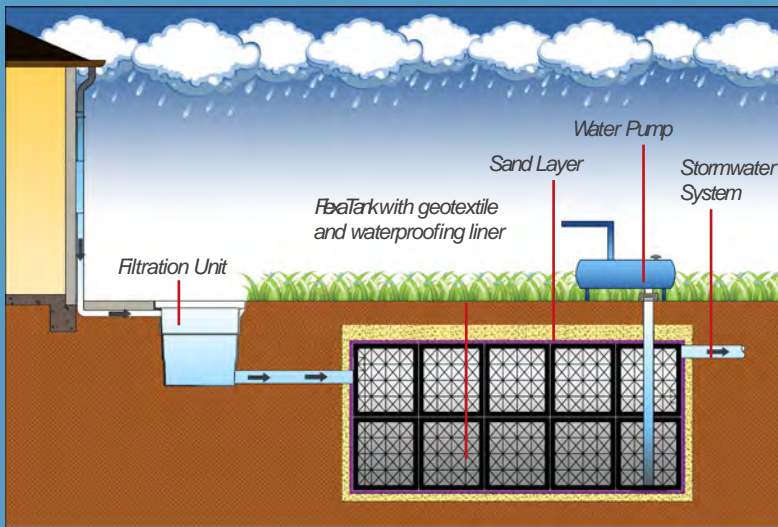
Slow percolation of rainwater from the surface into the tank and then slowly infiltrating into the immediate substrate allows stormwater to be filtered at source and ensures that clear clean water is eventually discharged into drainage networks.

Residence time of run-off prolonged by this slow process minimises downstream impact from high volumes of water in torrential downpours.



FlexaTank Infiltration System installed at a park

FlexaTank Retention System



FlexaTank units installed with an impermeable shell membrane, enables filtered rainwater channeled via pipes or allowed to slowly percolate into the tank from the surface to be retained and stored.

Installation of a water pump enables the retained water, from rainwater run-off, to be utilised for general washing and irrigation of landscaped areas, or when connected to a filter system can even be used for flushing of toilets.

Retention of the water also prolongs the residence time of run-off, helping to mitigate high volumes of water in torrential downpours and minimise downstream impact.



FlexaTank Retention System installed at a residential house



FlexaTank FFT 844

Technical Specifications

Volume	0.125 m ³
Tanks per m ³	8
Surface area	1.52 m ²
Surface void area	~38 %
Internal void	~93 %
Max. load – unconfined*	
3 Stabilizers	18.0 t/m ²
4 Stabilizers	23.0 t/m ²
5 Stabilizers	27.0 t/m ²
Dimensions	
Length	792 mm
Width	390 mm
Height	410 mm
Weight per tank	
3 Stabilizers	~6.7 kg
4 Stabilizers	~7.3 kg
5 Stabilizers	~8.0 kg
Material	Black Polypropylene
Biological/Chemical resistance	Unaffected by molds and algae, soil-borne chemicals, bacteria and chemicals
* Safety factor of 1.5 included	

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