

# VersiTank™

## Underground Percolation Tank

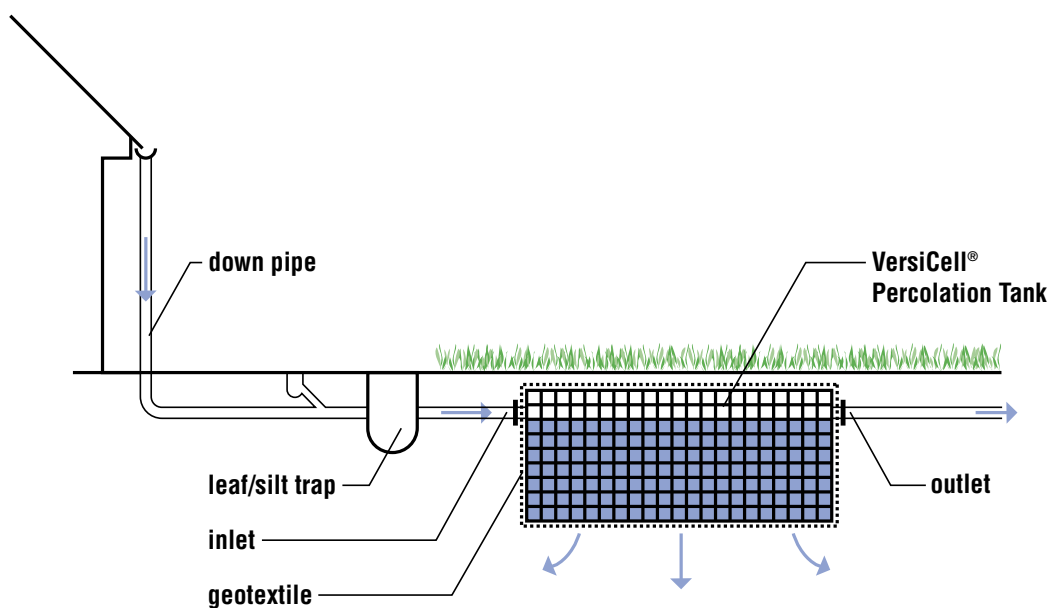
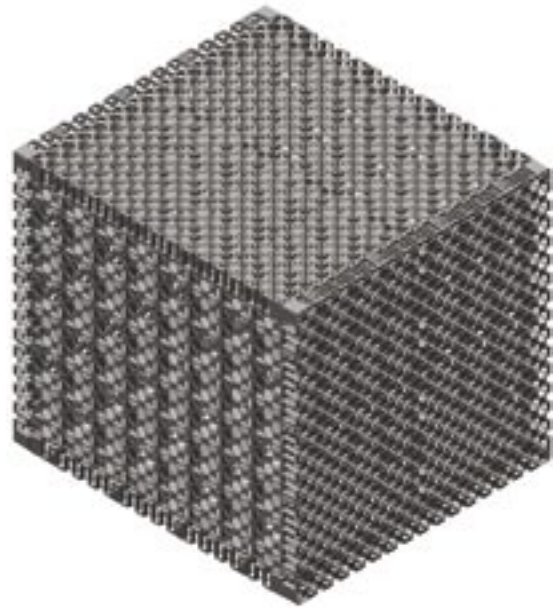
VersiTank™ offer architects, engineers and developers an efficient and cost effective sub-surface alternative to conventional methods for stormwater management.

VersiTanks are easily assembled using lightweight, high compressive strength interlocking VersiCell® modules and VC Stabilizers. VersiTanks enveloped with a permeable geotextile may be used as a soakaway system for rainwater from roofs and other surfaces such as parking areas, driveways, playgrounds and sports areas.

VersiTanks enable temporarily stored stormwater to be discharged into the surrounding soil system. Stormwater is therefore effectively controlled at source and both the quantity of water to be managed and the need to convey stormwater off site are reduced. Assembled units can be connected together to provide sufficient capacity for each application.

VersiTanks once installed, discharge the stored water to the surrounding soil, at a sufficient rate in order to provide the necessary capacity to receive subsequent run-off. The inherent run-off and soil infiltration rates must be determined for each application to calculate the number of VersiTanks required.

VersiTanks must be installed to engineering specifications and must be used in conjunction with recommended leaf and silt trap systems.



**VersiTank™ Percolation Tank System**

# VersiTank™

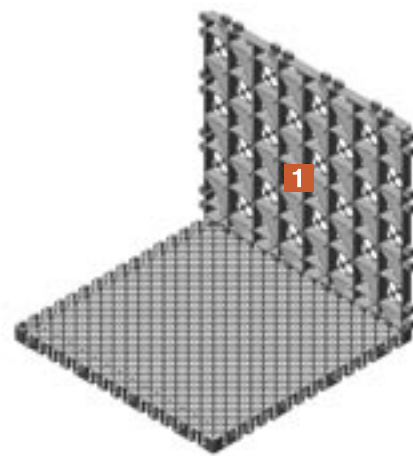
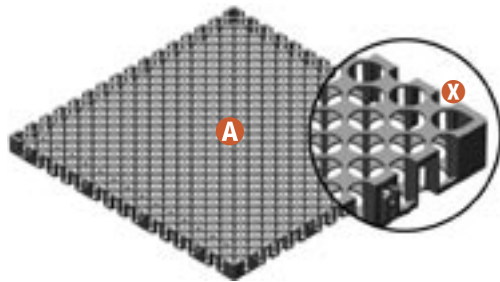
## Advantages

- High compressive strength allows use under trafficable areas
- Small apertures in both VersiCell® and VC Stabilizers minimises risk of compacted soil and stones rupturing geotextile
- Requires fewer tanks per unit volume compared to other systems

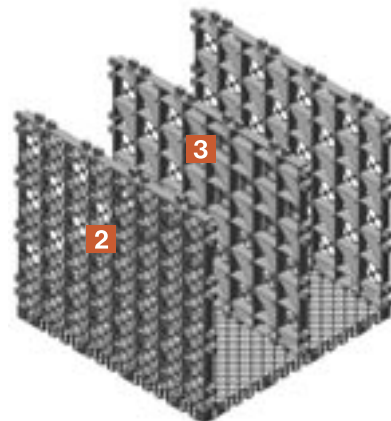
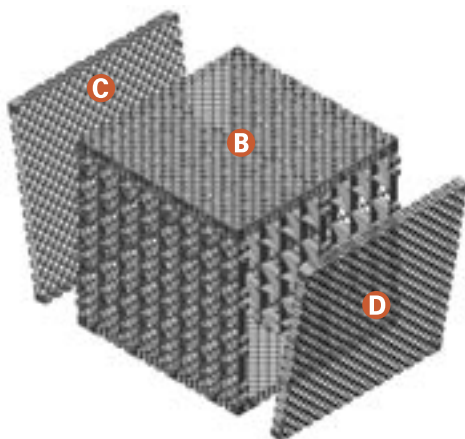
## Assembly Procedures

### VersiTank™ 500

Size: 500 mm x 500 mm x 560 mm



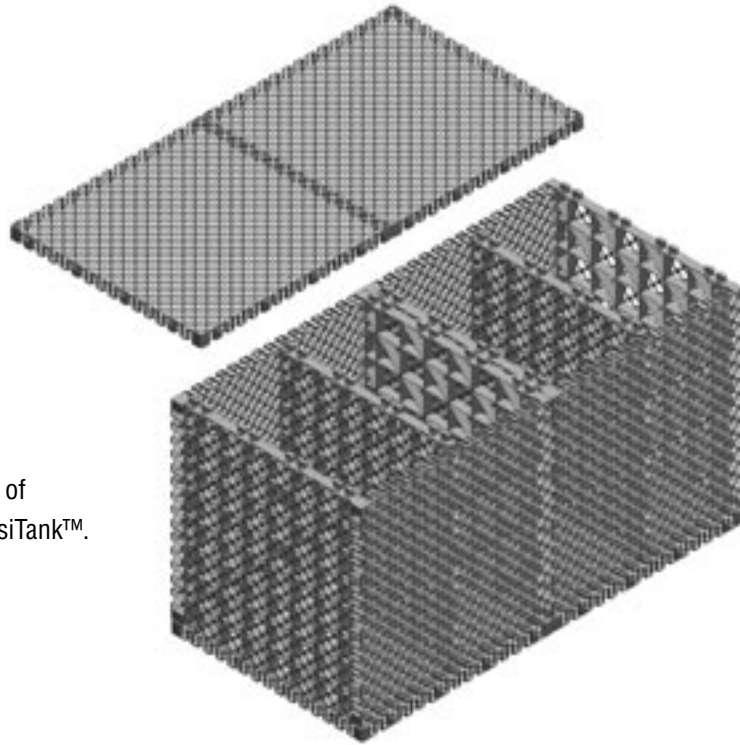
1. Select four VersiCell® panels.
2. Place VersiCell® panel **A** on a flat surface ensuring the sides with the large hole **X** in the corner faces upwards.
3. Place VC Stabilizer **1** onto VersiCell® panel **A**.
4. Push down to interlock the VC Stabilizer with the VersiCell® panel.



7. Place VersiCell® panel **B** on VC Stabilizers **1**, **2**, and **3** ensuring the side with the large holes in each corner is facing inwards.
8. Push down to interlock VersiCell® panel with the VC Stabilizers.
9. Repeat for VersiCell® panels **C** and **D** ensuring the sides with the large holes in the corners are facing inwards.
5. Similarly, interlock VC Stabilizers **2** and **3** into VersiCell® panel **A**.
6. If additional strength is required, four VC Stabilizers may be inserted into VersiCell® panel **A**.

### **VersiTank™ 1000**

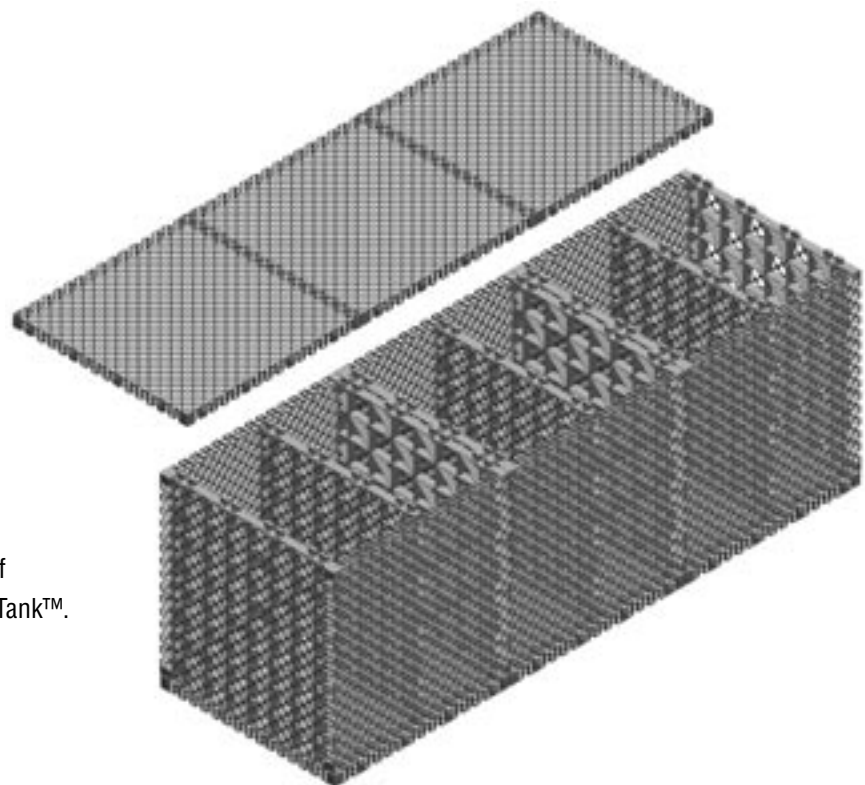
**Size: 1000 mm x 500 mm x 560 mm**



1. Pre-assemble four VersiCell® 1000 mm x 500 mm panels.
2. Repeat procedure as for assembly of 500 mm x 500 mm x 560 mm VersiTank™.

### **VersiTank™ 1500**

**Size: 1500 mm x 500 mm x 560 mm**



1. Pre-assemble four VersiCell® 1500 mm x 500 mm panels.
2. Repeat procedure as for assembly of 500 mm x 500 mm x 560 mm VersiTank™.

# Specifications

	VersiTank™ 500	VersiTank™ 1000	VersiTank™ 1500
<b>Dimensions</b>			
Length	500 mm	1000 mm	1500 mm
Width	500 mm	500 mm	500 mm
Height	560 mm	560 mm	560 mm
<b>Volume</b>	0.14 m <sup>3</sup>	0.28 m <sup>3</sup>	0.42 m <sup>3</sup>
<b>Tanks per m<sup>3</sup></b>	~ 7.1	~ 3.6	~ 2.4
<b>Surface area</b>	1.56 m <sup>2</sup>	2.56 m <sup>2</sup>	3.56 m <sup>2</sup>
<b>Surface void area</b>	> 65%	> 65%	> 65%
<b>Weight *</b>			
2 VC Stabilizers	~ 4.4 kg	~ 8.8 kg	~ 13.2 kg
3 VC Stabilizers	~ 5.2 kg	~ 10.4 kg	~ 15.6 kg
4 VC Stabilizers	~ 6.0 kg	~ 12.0 kg	~ 18.0 kg
<b>Max. load * (unconfined)</b>			
2 VC Stabilizers per module	~ 8.7 t/m <sup>2</sup>	~ 8.7 t/m <sup>2</sup>	~ 8.7 t/m <sup>2</sup>
3 VC Stabilizers per module	~ 11.4 t/m <sup>2</sup>	~ 11.4 t/m <sup>2</sup>	~ 11.4 t/m <sup>2</sup>
4 VC Stabilizers per module	~ 14.4 t/m <sup>2</sup>	~ 14.4 t/m <sup>2</sup>	~ 14.4 t/m <sup>2</sup>
<b>Material</b>	Polypropylene		
<b>Colour</b>	Black		
<b>Biological/chemical resistance</b>	Unaffected by moulds and algae, soil-borne chemicals, bacteria and bitumen		
<b>Service temperature</b>	-30°C to 120°C		

\* These values may vary due to the nature of recycled materials used in VersiCell® modules and VC Stabilizers.

## Installation Procedures

1. Excavate an area to design specifications.
2. Ensure the base of the excavated area is level and compacted.
3. Lay down, level and compact 50 mm of coarse sand.
4. Place geotextile over the base and up the walls of the excavated area. Provide a minimum 200 mm overlap and seal joints with adhesive PVC tape. Ensure sufficient geotextile overhang is available to cover the surface of the VersiTanks after placement in the excavated area.
5. Position VersiTanks in the excavated area with Stabilizers 1 and 2 in a vertical position.
6. Secure VersiTanks with stainless steel fixing clips, tie wire or high strength plastic cable ties.
7. If required, another layer of VersiTanks may be placed on top of the already positioned and secured tanks.
8. Cover the tops of the VersiTanks with geotextile and seal overlaps with adhesive PVC tape.
9. Backfill on the sides and over the top of the VersiTanks with 50-100 mm of clean coarse sand.
10. Ensure sufficient soil coverage over the top of the VersiTanks to meet engineering and design authority specifications.

**Website: [www.versicell.com](http://www.versicell.com)**

**Note:** The information in this brochure is based on current knowledge and experience and does not infer any legally binding assurance or warranty, expressed or implied. Intending purchasers should verify whether any changes to specifications or applications have been made since this literature was issued.



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