

VersiTank™

Underground Percolation Tank

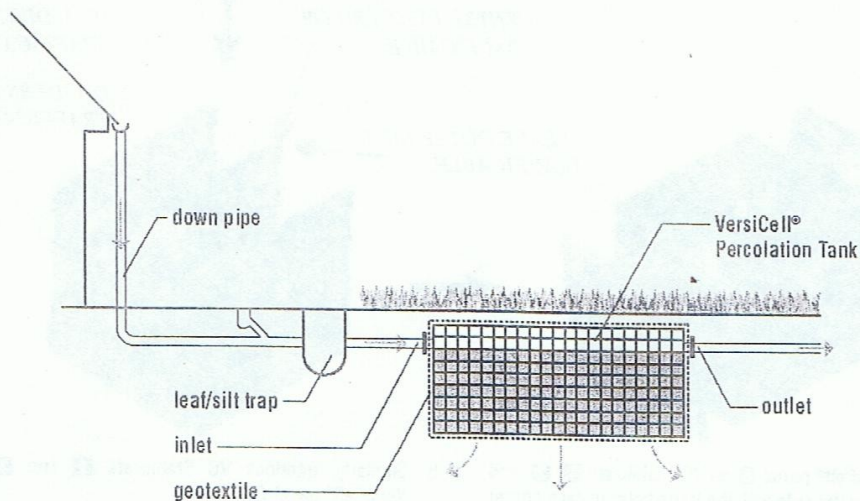
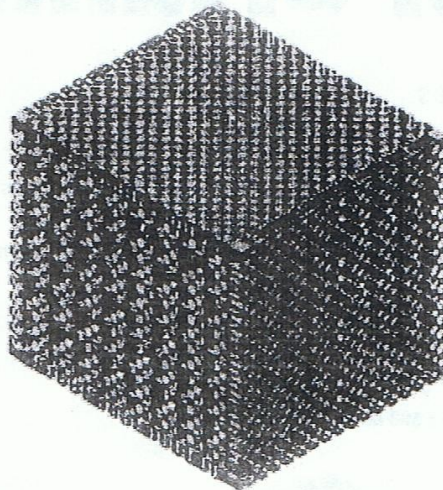
VersiTank™ offer architects, engineers and developers an efficient and cost effective sub-surface alternative to conventional methods for storm water management.

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

6.30

**FOR COMBINED SYSTEMS, OTHER THAN BLOCKS OF
FLATS OR UNITS WITH MORE THAN 4 BEDROOMS**

Number of Bedrooms	Soil Classification			
	Sand		Loams or gravels	
	Minimum infiltrative area (m ²)	VersiTank leach drain (No. x length) (No. x modules)	Minimum infiltrative area (m ²)	VersiTank leach drain (No. x length) (No. x modules)
2 or less	18.8	2 x 6m 2 x 12 modules	28.2	2 x 9m 2 x 18 modules
3	25.4	2 x 8m 2 x 16 modules	38.1	2 x 12m 2 x 24 modules
4 or more	27.6	2 x 9m 2 x 18 modules	41.5	2 x 13m 2 x 26 modules

NOTE: The "VersiTank" leach drain has an infiltrative area of approximately 1.62 m² per metre of length, provided that effluent enters through the top of the drain. Each length of drain has an additional infiltrative area of 0.56 m² provided by the two end plates.

- 3) This approval and the conditions of approval may be varied or withdrawn at the discretion of the Executive Director, Public Health.

All local governments will be advised of this approval and shall be provided with full copies of the approval documentation, including drawings and specifications.

Should you have any questions regarding this approval, please contact Mr Rod Holme of the Wastewater Management Branch on 9388 4941.

Yours sincerely



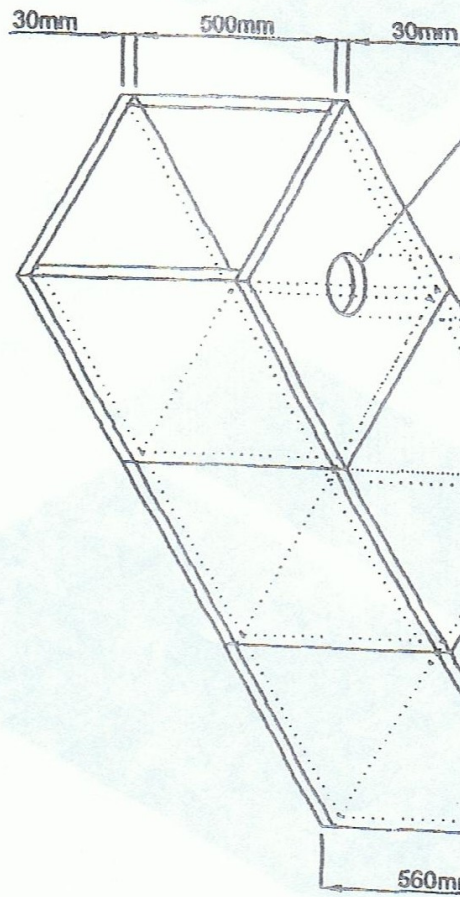
Dr Donna Mak
delegate of
EXECUTIVE DIRECTOR
PUBLIC HEALTH

24 May 2004
(4524hr1a.doc)



PROVIDE 150mm DIA. HOLES FOR
INLET PIPE AND INSPECTION
OPENING (cut on site)

INLET PIPE



Disclaimer:
This document is not to be considered a full
design and is provided without obligation.
Complete engineering design is to be
performed by a suitably qualified engineer.

DATE: 25/05/04	BY: A. Forster	CHK: SMC
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Designed:	March 2004
Date:	SMC
Drawn:	SMC

VERIS TANK LEACH DRAIN
TYPICAL DETAILS

Specifications

	VersiTank™ 500	VersiTank™ 1000	VersiTank™ 1500
Dimensions			
Length	500 mm	1000 mm	1500 mm
Width	500 mm	500 mm	500 mm
Height	560 mm	560 mm	560 mm
Volume	0.14 m ³	0.28 m ³	0.42 m ³
Tanks per m³	~ 7.1	~ 3.6	~ 2.4
Surface area	1.56 m ²	2.56 m ²	3.56 m ²
Surface void area	> 65%	> 65%	> 65%
Weight *			
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
Max. load * (unconfined)			
2 VC Stabilizers per module	~ 8.7 t/m ²	~ 8.7 t/m ²	~ 8.7 t/m ²
3 VC Stabilizers per module	~ 11.4 t/m ²	~ 11.4 t/m ²	~ 11.4 t/m ²
4 VC Stabilizers per module	~ 14.4 t/m ²	~ 14.4 t/m ²	~ 14.4 t/m ²
Material	Polypropylene		
Colour	Black		
Biological/chemical resistance	Unaffected by moulds and algae, soil-borne chemicals, bacteria and bitumen		
Service temperature	-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. + 400 Free Draining Soil
10. Ensure sufficient soil coverage over the top of the VersiTanks to meet engineering and design authority specifications.

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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