

Visual Soakaway Design 4.0

Project Details

Project Title: Demo Soakaway Project

Project Number: 12345

Designer: David Drewette

Global Variables

Impermeable Area :-100 m2

Soil Infiltration Rate :- 0.0000055 m/sec

Storm Duration :- 360 minutes

Rainfall :- 0.012444 metres

Void Ratio :-0.3

Volumetric Runoff Coeff :- 1.00

Factor of Safety :-1

Ring soakaway failure depth :- 4 metres

Half Empty failure time (hrs) :- 24 hours

* Base has been included in design of trench soakaway *

* Base has been included in design of ring soakaway *

* Granular surround has been included in ring soakaway design with a margin of 0.2 metres. *

Trench Soakaway

Length :- 1.19 metres

Width :- 1.77 metres

Depth :- 1.01 metres

Half empty time :- 3.16 hours (decimal)

Surface area of exfiltration :- 5.09 metres squared

Precast Concrete Ring Soakaway

Ring Size (mm)	Depth (metres)	Half Empty Time (hours)
900	1.17	12.30
1050	0.94	12.15
1200	0.77	11.76
1350	0.65	11.22
1500	0.55	10.62
1800	0.43	9.38
2100	0.35	8.28
2400	0.29	7.36
2700	0.26	6.63

Variable Ring Soakaway Design

Diameter (mm)	Depth (metres)	Half Empty Time (hours)
900	1.17	12.30