

Calculation of Soakaway Specification with reference to BS 6297

Time for pit to empty from approximately 75% to 25% depth.

Divide by the distance the water drops.

This gives the average time in seconds required for the water to drop 1mm.

Average figure from all the tests is the percolation value (Vp)

Values from tests must not vary by more than 50% from the average.

Value of Vp must lie between 15 and 100 for a successful soakaway.

Test Pit 1

Test Fill 1

150 min - 30 min = 120 min

120 min x 60 = 7200 sec

7200 sec / 305mm = 23.6

Test Fill 2

180 min - 45 min = 135 min

135 min x 60 = 8100 sec

8100 sec / 315 mm = 25.7

Test Fill 3

210 min - 60 min = 150 min

150 min x 60 = 9000 sec

9000 sec / 250 mm = 36

Test Pit 2

Test Fill 1

150 min - 30 min = 120 min

120 min x 60 sec = 7200 sec

7200 sec / 345 = 20.9

Test Fill 2

180 min - 45 min = 135 min

135 min x 60 = 8100 sec

8100 sec / 315mm = 25.7

Test Fill 3

210 min - 60 min = 150 min

150 min 60 = 9000 sec

9000 sec / 245 mm = 36.7

Average Vp

$23.6 + 25.7 + 36 + 20.9 + 25.7 + 36.7 = 168.6$

$168.6 / 6 = 28.1$

Vp = 28 value acceptable, between 15 & 100 required for a soakaway

Soakaway capacity

Output based upon British Flows and Loads 150 litres/ person / day.

6 person plant x 150 litres = 900 litres / day

3 plants x 900 litres = 2700 litres

4 days storage required x 2700 litres = 10800 litres

10800 litres / 1000 = **10.8m³** soakaway capacity.