

DETAILS OF FOUL PERCOLATION TEST

This test procedure is to be used to assess the suitability of foul drainage fields only and not surface water soakaways. Before carrying out the testing procedure, a trial hole should be dug to determine the position of the standing water table. The trial hole should be minimum of 1m² in area and 2m deep, or a minimum 1.5m below the invert of the proposed drainage field pipework. The ground water table should not rise to within 1m of the invert level of the proposed effluent distribution pipe.

Name: GWILYM OWEN JONES

FULL ADDRESS OF PROPERTY TO BE DRAINED:

TY MAWR BARN CONVERSION, PONTFADOG,
WREXHAM, LL20 7AS

PROCEDURE.

- (1) A hole 300mm square should be excavated to a depth 300mm below the proposed invert level of the effluent distribution pipe.
- (2) Fill the 300mm square section of the hole to a depth at least 300mm with water and allow it to seep away overnight.
- (3) Next day, refill the test section with water to a depth of at least 300mm and observe the time, in seconds, for the water to seep away from 75% full to 25% full level. Divide this time by 150mm. The answer gives the average time in seconds (Vp) required for the water to drop 1mm.
- (4) The test should be carried out at least three times with at least two trial holes. (care to be taken to avoid abnormal conditions ie. Heavy rain, severe frost, drought).

TEST No 1 Trial Hole 1

Date: 2/5/22 Weather Conditions: DRY
 (A) Depth of water (Minimum 300mm) 300mm
 (B) Time in seconds taken to seep away. 34 mins 2040
 Therefore average time for water to drop to 1mm = B/A = 13.6

TEST No 2 Trial Hole 1

Date: 4/5/22 Weather Conditions: DAMP
 (A) Depth of water (Minimum 300mm) 300mm
 (B) Time in seconds taken to seep away. 42 mins 2520
 Therefore average time for water to drop to 1mm = B/A = 16.8

TEST No 3 Trial Hole 1

Date: 5/5/22 Weather Conditions: DAMP(A) Depth of water (Minimum 300mm) 300mm(B) Time in seconds taken to seep away. 45.5 mins 2730Therefore average time for water to drop to 1mm = $B/A =$ 18.2

TEST No 4 Trial Hole 2

Date: 2/5/22 Weather Conditions: DRY(A) Depth of water (Minimum 300mm) 300mm(B) Time in seconds taken to seep away. 37mins 2220Therefore average time for water to drop to 1mm = $B/A =$ 14.8

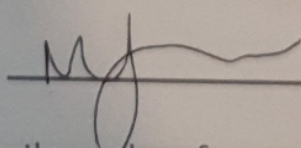
TEST No 5 Trial Hole 2

Date: 4/5/22 Weather Conditions: DAMP(A) Depth of water (Minimum 300mm) 300mm(B) Time in seconds taken to seep away. 39mins 2340Therefore average time for water to drop to 1mm = $B/A =$ 15.6

TEST No 6 Trial Hole 2

Date: 5/5/22 Weather Conditions: DAMP(A) Depth of water (Minimum 300mm) 300mm(B) Time in seconds taken to seep away. 42mins 2520Therefore average time for water to drop to 1mm = $B/A =$ 16.8

95.8

(C) Average of the 6 tests (V_p): $(1 + 2 + 3 + 4 + 5 + 6) / 6 =$ 15.96 $=$ 16Floor area of land drainage trench (m^2) required for irrigation. $= (C) \underline{16} \times 0.25 \times \text{No. of persons} * 'P' \underline{7}$ $=$ 28 m^2 SIGNED: 

*To determine the number of persons/population 'P' refer to Flows and Loads 4 extract overleaf.