

Percolation Test Recording Sheet

1. These tests should be carried out within and be representative of, the proposed infiltration area which should be at least 5m from the intended building and any boundary.
2. Excavate 2 percolation holes, not less than 5m apart, 300mm square to a depth of 300mm below the proposed invert level of the effluent distribution pipe. Where deep holes are necessary, the hole should conform to this shape at the bottom but may be enlarged above the 300mm level to enable safe excavation to be carried out.
3. Fill the 300mm square section of the holes to a depth of at least 300mm with water and allow it to seep away overnight. It is important to saturate the soil surrounding the test hole to simulate day to day conditions in an operational drainage field.
4. Next day, refill the test sections with water to a depth of at least 300mm and observe the time (T) in seconds, for the water to seep away from 75% to 25% full level.
5. Extreme weather conditions should be avoided when testing.
6. In evaluating your test results please note that where the Vp value does not fall between 15 secs/mm and 100secs/mm then infiltration trench or bed systems may not be possible.

Trial Hole	Depth below ground level	Depth of Water (minimum 300mm)	Time taken between 75% & 25% full(seconds) (T)	Percolation Value $V_p = T/150$ (Vp)	Occupant Capacity (P)	Minimum Area $A = P \times V_p \times 0.25$ (A)
1	(Test 1)	300mm	3900	26	5	32.5
	(Test 2)	300mm	4200	28	5	35
	(Test 3)	300mm	4020	26.8	5	33.5
2	(Test 1)	300mm	4680	31.2	5	39
	(Test 2)	300mm	4800	32	5	40
	(Test 3)	300mm	5160	34.4	5	43
Average Vp				Average A m [▲]		

NB For wastewater that has received secondary treatment followed by settlement, the area may be reduced by 20% i.e. $A = P \times V_p \times 0.2$

Site Location: Bryn Hedd, Old Road, Bwlchgwyn, Wrexham, LL11 5UH

Description of ground strata: Good loose soil with layer of more claylike soil underneath

Warrant Ref. Number if known: _____ Date test carried out: 22/6/21

Name of person carrying out the test: Alun Roberts

The water table is more than 1m below the bottom of the distribution pipes and I further confirm that there are no wells, springs or water abstraction points within 100m of the proposed infiltration area.

Signed: A Roberts Date: 22/6/21

Guidance Notes:

A preliminary ground assessment should out to determine the suitability of the ground initially.

The following check list indicates the actions that should be taken and the type of information that should be collected:

- SEPA's groundwater protection policy;
- Underlying geology and aquifers;
- Whether the ground is liable to flooding;
- Nature of the sub-soil and groundwater vulnerability;
- Implication of plot size;
- Proximity of underground services;
- Ground topography and local drainage patterns;
- Whether water is abstracted for drinking, used in food processing or farm dairies;
- Implication for, and of, trees and other vegetation;
- Location of surface waters and terrestrial ecosystems.

If the preliminary ground assessment indicates that the ground is unsuitable for the installation of an infiltration system an alternative disposal method should be considered.

Prior to the main test a trial hole should be dug to determine the position of the water table and soil conditions. The trial hole should be a minimum of 2m deep, or a minimum of 1.5m below the invert of the proposed distribution pipes. The trial hole should be left uncovered for a period of 48 hours before measuring any water table level. For safe and effective dispersal of the wastewater, the groundwater and bedrock should be at least 1m below the bottom of the distribution pipes. It should be noted that it is the seasonally highest level of the water table that should be determined in the infiltration area.