

Drainage Field Siting and Percolation Test Calculation Form

NB – Development proposing the use of non-mains drainage schemes will only be considered where connection to the mains sewer is not feasible

Guidance Notes:

The following table provides details of siting distances contained in Approved Document H 2010 (Wales), Section H2 of the Building Regulations.

Siting of septic tanks, treatment plants and soakaways			
Distance from	Dwelling	Watercourse	Borehole/well
Drainage field	15m	10m	50m
Septic Tank	7m	10m	50m
Treatment plant	7m	10m	50m

Conducting the main percolation test

The percolation test should be carried out in accordance with Approved Document H 2010 (Wales), Section H2 of the Building Regulations.

1. These tests should be carried out within and be representative of, the proposed soakaway area.
2. Excavate at least 2 percolation holes 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.
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. (ie a depth of 150mm)
5. Extreme weather conditions should be avoided when testing.

please complete the below diagram and form overleaf and return to appointed planning officer and ensure that the porosity test holes are left open for inspection.

Drainage scheme siting diagram

See Block Plan

29.04.2024.

Percolation tests in accordance with the guidance provided with this form on (date) in respect of premises at: Tyn Tull, Llanarmon.

Description of ground strata: Freely draining acid loamy soils over rock

The overall depth of the test holes dug were: (state in metres/millimetres)

Test Hole 1	Test Hole 2
1m	1m

I confirm that the water table did not rise to within 1 metre of the invert of the proposed land Irrigation scheme.

The weather conditions on the day were: drizzle .
The results of the percolation tests were:

Test Hole 1				Test Hole 2			
	Time in Seconds		V _p		Time in Seconds		V _p
Test 1	8500	+150	56.7	Test 1	9200	+150	61.3
Test 2	8600	+150	57.2	Test 2	9150	+150	61
Test 3	8500	+150	56.6	Test 3	9100	+150	60.6
Trial Hole 1 – Average V _p			56.86	Trial Hole 2 – Average V _p			60.9

Average V _p of Test Holes 1 & 2	58.88	
Use this averaged V _p figure in the following formula $P \times V_p \times 0.25 = A$		

Calculating the drainage field area							Key
P	X	V _p	X	0.25	=	A	P = no of people served by the tank A = floor area of the drainage field (in square metres) V _p = Percolation Value TW = Trench width in metres L = length of the drainage field (in metres)
4	X	58.88	X	0.25	=	58.88	
						m ²	
Calculating the linear drainage field length							
A	÷	TW	=	L			
58.88	÷	0.9	=	65.42	m		