

Job: The Old Thatch Lower
Job No. 24061
By: NRC Checked: MJ



Foul Drainage Percolation Test Calculations

Foul drainage field calculated in accordance with BS6297:2007 and also building regulations Part H

Two test pits were excavated and the following results provide an average of the 3 no. of percolation tests within each pit between 75% and 25%

Test Pit 1			Test Pit 2		
Test 1:	178.00	Mins	Test 1:	174.50	Mins
Test 2:	200.75	Mins	Test 2:	213.50	Mins
Test 3:	225.75	Mins	Test 3:	237.50	Mins

TP(1) average = **202** Mins

TP(2) average = **209** Mins

Therefore, the average value of Vp (seconds divided by 150 is):

Vp(1) = **80.6** s/mm

Vp(2) = **83.4** s/mm

Hence, the average Vp from both test pits is:

Vp(Average) = **82.0** s/mm

Drainage field disposal should only be used when percolation tests indicate average values of between 12 and 100.

$$\text{Is } 12 \leq V_p \leq 100 ? \qquad 12 \leq 82.00 \leq 100$$

Therefore, the assessment of percolation testing completed in accordance with BS6297:2007 and Building Regulations Part H have proven favourable.

Calculating Drainage Field Area and Length of Pipework

To calculate the floor area (At) of the drainage field, the following formula should be used:

$At = 0.25pV_p$; Where p is the no. of persons served, V_p is the percolation value (s/mm)

Therefore, considering the proposed development has an occupation of:

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$$At = 143.50 \text{ m}^2$$

Therefore, assuming a trench width of 0.90m the required length of pipework for the drainage field is:

$$L = At/0.9$$

$$L = 159.4 \text{ m}$$