



Percolation Test Method

- Excavate at least three holes 300mm square to a depth at least 300mm below the proposed invert level (300mm) of the infiltration pipe, spacing them along the proposed line of drainage. If the water table is reached, please note at what depth.
- Saturate the soil by filling each hole to a minimum of 300mm and allow this to seep away completely.
- If the water drains rapidly (within 10 mins), then the hole should be filled again up to a maximum of 10 times. If the water continues to drain away rapidly, then the ground is not suitable.
- If the water has not soaked away within 6 hours, then the area is not suitable.
- Determine the percolation rate by refilling each hole 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 (225mm to 75mm).
- Divide this time in seconds by 150. This gives the average time in seconds required for the water to drop 1mm.
- Repeat the test at least 3 times in each hole.
- Take the average figure from the tests to produce the percolation value Vp (in seconds).
- Obtain the average figure for the percolation value (Vp) by summing up all the values and dividing by the number of values used.
- Enter the results on the table provided and return to Allerton.

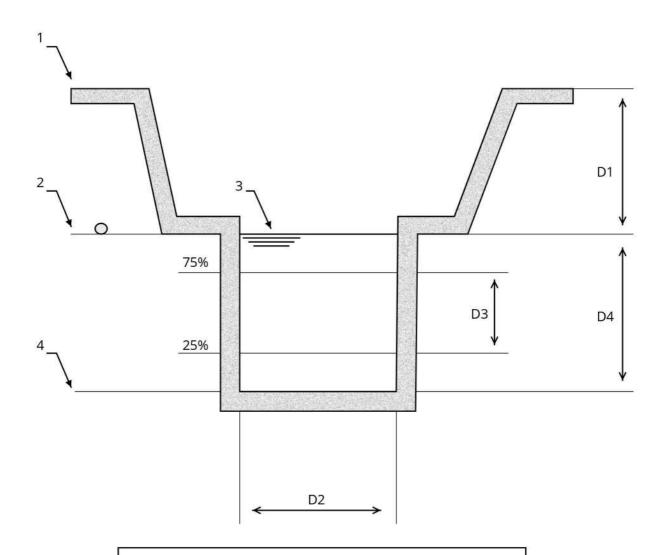








Cross-section of typical percolation test hole



Key

1 - Ground level	D1 - 0.3M
2 - Proposed invert of infiltration pipe	D2 - 0.3M
3 - Water level inside hole for percolation test	D3 - 0.15M
4 - Base of percolation test hole	D4 - 0.3M



Hole #1	Test Date	Test #	Start Time	Finish Time	ElapsedTime			Vp (s/mm)
					Hours/minutes (h/mins)	Minutes (mins)	Seconds (s)	Seconds divided by 150mm
		1						
		2						
		3						
	•	•	•	•	Average Vp for Hole 1		•	

Vp (s/mm) Seconds divided by 150mm	ElapsedTime			Finish Time	Start Time	Test #	Test Date	Hole #2
	Seconds (s)	Minutes (mins)	Hours/minutes (h/mins)					
						1		
						2		
						3		
			Average Vp for Hole 2			3		

Hole #3	Test Date	Test #	Start Time	Finish Time	ElapsedTime			Vp (s/mm)
					Hours/minutes (h/mins)	Minutes (mins)	Seconds (s)	Seconds divided by 150mm
		1						
		2						
		3						