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Seawinds, Carpenters Lane, Brook,
Newport, Isle of Wight PO30 4EU
email: sales@mstdrain.co.uk
Tel: 01983 740064

Job No.			
Sheet no.	1		
Date	25/09/10		
By	IJ	Checked	Approved

MasterDrain
SW 8.00

Project	Gwynedd Property Developments
Title	Septic tank calculations

Percolation Test Data

Trial holes excavated 300mm square as stipulated in Approved Documents Part H
Holes filled to top, and allowed to drain.
Holes refilled and water allowed to drain. Time taken to drain between 75%
and 25% full noted as per Regulation requirements

Trial hole	No.1	No.2	No.3
Initial depth (mm) 75%	225	225	225
Final depth (mm) 25%	75	75	75
Initial time (sec)	0	0	0
Final time (sec)	4500	4800	3600
Ave. time (sec)for 1mm fall	30	32	24
Percolation value	30	32	24
Average Percolation value (Vp) =	28.67		

Occupancy of building based on 5 persons for 12 months of the year.

Area of drainage required:-

$$\begin{aligned} \text{Area} &= \text{Occupancy} \times \text{Vp} \times 0.25 \\ \text{Area} &= 5 \times 28.7 \times 0.25 \\ \text{Area} &= 35.83\text{m}^2 \end{aligned}$$

$$\begin{aligned} \text{Septic tank size} &= (180 \times \text{occupancy}) + 2000 \\ &= 180 \times 5 + 2000 \\ &= 2900 \text{ litres} \end{aligned}$$

Comments/Departures from Specified Procedures:

Approved Document H (2001) states that the percolation value should be between 12 and 100