

Rain Garden Sizing Worksheet

Slope

Measured distance between two stakes (run): _____ m

Measured distance between the ground and the string (rise): _____ m

$$\frac{\text{(rise)}}{\text{(run)}} = \text{_____} \times 100 = \text{_____} \% \text{ slope}$$

Soils present (sand, loam, clay): _____

Infiltration test results (1 cm = 10 mm)

1. $\frac{\text{(a) _____ cm}}{\text{(b) _____ hours}} \times \frac{24 \text{ hours}}{\text{day}}$

2. $24 / \text{(b)} = \text{(c)}$

3. $\text{(c)} \times \text{(a)} = \text{_____ cm per day (d) (up to 30 cm)}$

Rain garden depth = _____ cm (may convert to inches) (d)

Note: If you have moderate to fast-draining soil, your infiltration test results will yield a very high number (the “d” value in Step 3 – Infiltration Test Results, which indicates your rain garden depth).

In this case, the rain garden depth should be no more than 30 cm, even if your calculations determine that it can be much greater.

Footprint Ratio

1. $\frac{2.5 \text{ cm per day}}{\text{(d) _____ cm per day}} = \text{(e)}$

2. $\frac{2.5}{\text{(d)}} = \text{(e)}$

Rain garden area

Footprint of home or building: _____ square metres (f)

Percentage of roof area that feeds into rain garden downspout: _____% (g)

$\text{(f)} \times \text{(g)} = \text{_____ square metres of drainage area (h)}$

Drainage Area x Footprint Ratio = square metres of rain garden

$\text{(h) _____} \times \text{(e) _____} = \text{_____ square metres}$

Note: Convert the percentage value (g) to a decimal when calculating square meters of drainage area. For example, 25% = 0.25