How To Calculate The Size of a Rain Garden

TreePeople

- It is important to determine if you have the space.
- Use the following as a guide.

Let's get started

1. **Multiply the width by the length of the catchment area (roof) that directs rain into the downspout.**
   - This measurement gives the square footage of the catchment area.
2. **Multiply the catchment area by the amount of rain fall.**
   - The rain garden should be sized to capture at least 3/4 inch of rain that falls on the catchment area.
   - This measurement is 0.0625 feet.
3. **Divide by the depth of the rain garden.**
   - The rain garden depth should be 6 inches.
   - This measurement is 0.5 feet.

Is My Site Appropriate?

Is the area:

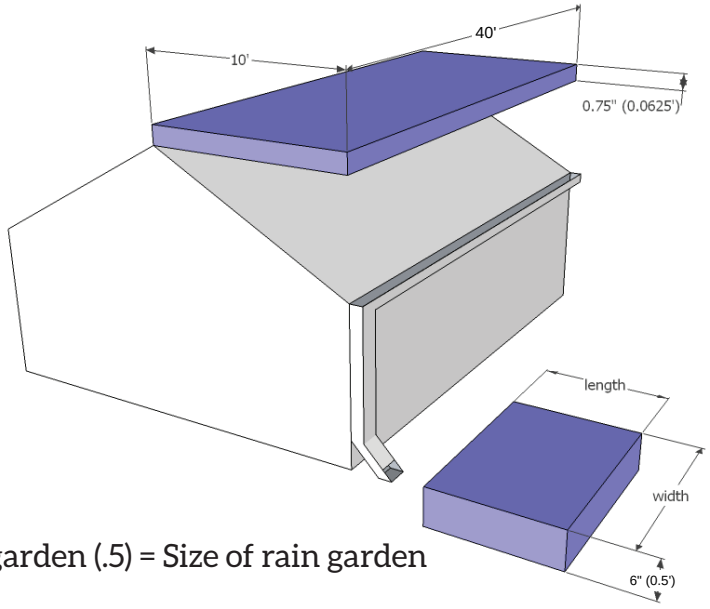
— In full sun or partial shade?

— At least 5 feet from utilities, driveway or the foundation of the house/garage?

— At least 3 feet from a sidewalk?

— In an area where water can be directed?

If the answer is "yes" to all the questions, it is a potential site for a rain garden.



Here's the calculation:

Catchment area x Rain fall (0.0625) / Depth of rain garden (.5) = Size of rain garden

Example for a 400 square foot catchment area:

400 square feet of catchment area x .0625 divided by the rain garden depth of .5 = 50 square feet

How many gallons?

400 square feet x 3/4 inch of rain (.0625 feet) = 25 cubic feet

25 cubic feet x 7.5 gallons = about 187.5 gallons!

- **That means that a roof of about 400 square feet can capture almost 200 gallons every time it rains an inch!**
- **The water can go into a rain garden area that is about 50 sq. feet: 5' X 10' or 7' X 7', etc.**

TreePeople

(818) 753-4600
info@treepeople.org
www.treepeople.org