

What is a Rain Garden?



A Rain Garden is a shallow depression in your yard that is planted with native wildflowers and grasses. It is designed to collect rain water that runs off your rooftop or is discharged by your sump pump.

Why Install a Rain Garden?

- Stormwater runoff is a major cause of water pollution in our streams and rivers. Rain Gardens capture stormwater runoff, allowing it to infiltrate into the ground. This recharges groundwater and naturally filters pollutants.
- Rain Gardens make for beautiful, low-maintenance, landscape features because they are planted with native, perennial wildflowers and grasses.
- Rain Gardens provide food and habitat for birds and butterflies.

Rain Garden Design and Construction

STEP 1. Size your Rain Garden

- Measure the area of your house; this is known as the footprint. **DO NOT** take the slope of the roof into account.
- Depending on soil type, the garden should be 20 to 30 percent of the roof area that will drain into the garden.
- The depth should be 3 to 12 inches. If you have poorly drained soils, plan on creating a shallow depression, 3 to 6 inches deep, that covers 30 percent of the drainage area. For well drained soils, the depression can be deeper, 6 to 12 inches, and cover only 20 percent of the total drainage area (see sizing sample below).



STEP 2. Select a Location and Test the Soil

- Choose a spot at least 10 feet away from your house to which you can direct your downspout or sump pump.
- Pick an area with full or partial sun: do not place the garden under a tree. Your Rain Garden should receive a minimum of a half-day of sunlight.
- You should be able to maintain a minimum of a 1 percent slope from your downspout to your garden.



water. If it takes longer than 24 hours for the water to soak in, **then the drainage is not adequate**. Additional preparations will need to be made.

STEP 3. Dig In!

- **Be aware of service lines and utilities!**



- Use a string to outline the perimeter of the garden.
- A kidney or teardrop shape works best.
- Dig the depression 3 to 12 inches deep.
- Gradually slope the sides.
- **Make sure the bottom is level.** This will ensure that the water is evenly distributed throughout the garden.
- Create a berm around the downhill edge of the garden to keep water from flowing out. Compact the berm to prevent erosion.

STEP 4. Plant your Rain Garden

- Choose plants that are both drought tolerant and can withstand wet soils for up to 24 hours.
- Select a variety of **native** wildflowers, grasses and shrubs.

Combine plants with alternating heights, bloom times, and textures.



- Don't use seeds, select plants from the nursery.
- Apply top soil as needed.
- Apply mulch over the bed.
- Water frequently until plants are well established.
- Avoid fertilizer. Fertilizer will promote weed growth without benefitting your native plants.

Sizing example:

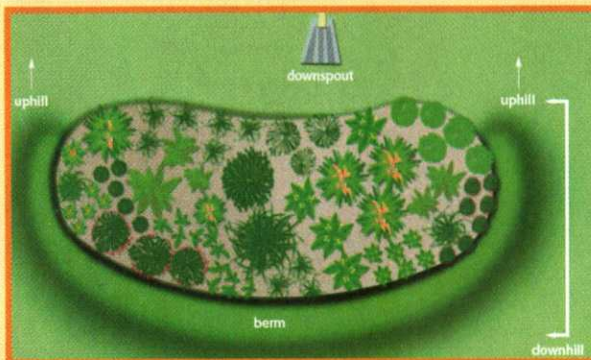
30' x 30' home = 900 ft² rooftop

1/4 of this area drains to one downspout: 900 ft² / 4 = 225 ft²

20% of 225 ft² = 45 ft² (for sandier, well drained soils)

30% of 225 ft² = 67.5 ft² (for clay, poorly drained soils)

The **SAMPLE** rain garden should be between 45 ft² and 67.5 ft²



Additional Tips

- Don't worry about mosquitoes. Your Rain Garden should not retain water long enough for mosquitoes to have an opportunity to breed.
- You may direct your downspout or sump pump to the rain garden by digging a shallow swale or by routing it through a drain pipe.
- In the winter, leave dead or dormant plants standing; cut back in the spring.
- If your soil lacks organic material you may dig the depression an additional 2 to 3 inches and fill in with peat or compost.
- Be creative! Add stones, garden ornaments and birdhouses to enhance your Rain Garden!

