

Designing Your Rain Garden

Step 1: Estimate rooftop area draining to each of your most promising downspout(s). Simply, take the total rooftop area you entered in your basic data on lot cover form, and divide by the total number of downspouts at your home:

Total Roof Area: Square Feet	No. of Downspouts	Area Draining to Rain Garden: Square Feet
<p>Note: For the most accurate estimate, you can measure the actual roof area draining to each downspout.</p>		

Step 2: Determine minimum surface area for your rain garden. Assume that the ponding area of your garden will be at least 6 inches deep, and will capture the first inch of rainfall that lands on your roof. The minimum surface area for your rain garden is computed using the following equation:

Surface Area Draining to the Rain Garden: Square Feet	"Engineering Factor" (multiply by 0.12)	Minimum Surface Area for Rain Garden: Square Feet
	0.12	
<p>Note that one 4 by 8 tarp would be 32 square feet.</p>		
<p>The engineering factor computes how much surface area is needed in your rain garden to capture one inch of rainfall that falls on your roof.</p>		