How To Determine The Number of Rain Barrels to Install

- It is important to calculate the size of the catchment area to determine the number of rain barrels needed. Also, consider how the rain from a downspout will get into the barrel(s).
- Use the following as a guide.

Let’s get started

Depending on the size of the area where the water is coming from (the catchment area), will determine if it is appropriate for one or more rain barrels.

1. **Determine the size of the catchment area.**
   - The catchment area is where the water is being directed from, usually a roof top.
     - Look at your rooftop to determine what part of the roof you need to measure. It will be the part that slopes toward the downspout where the rain barrel(s) will be located.
   - Multiply the width by the length of the catchment area.
     - This measurement gives the square footage of the catchment area.

   - Divide the square footage by the number of downspouts that are attached to the catchment area.
     - This gives the approximate square footage of catchment area per downspout.
2. Based on an average 3/4 inch of rain that falls on the catchment area (0.0625 feet), every 100 square feet of catchment produces approximately 60 gallons of rain water.
   - Since most storm events in Los Angeles are ¾” or less, you will need approximately 60 gallons of tank capacity for every 100 sq. ft. of catchment area.
     - One rain barrel holds approximately 60 gallons of water.
   - If the catchment area produces more rain water than what will fill a rain barrel, then plan to:
     - Direct the rain barrel’s overflow hose into an area that can receive the extra water, such as a garden planter or drain.

3. If the downspout runs along a wall, it will need to be shortened and have an elbow attachment added to extend out to the top of the rain barrel.
   - Another option is to attach a rain chain from the gutter down into the rain barrel.