

# MAKING RAIN BARRELS



## RAIN BARRELS

A new concept? No, rain barrels have been used for generations as a means of water collection. Their uses include the accumulation of water for gardens, plants, washing clothes, bathing, drinking and much more. This presentation only addresses storing rain water for non-potable outdoor use.

There are many benefits to constructing rain barrels. It will help protect precious natural resources, save money, improve the health of the landscape & potted plants, reduce storm water runoff and control the moisture level around our homes.

On average, an inch of rainfall on a 2000 square foot roof can collect about 1,000 gallons of water. If you have room, multiple barrels would be ideal for storing extra water.

Water pressure directly depends on the height of level of the water stored in the barrel. The water pressure will be minimal and not sufficient enough to operate most low volume irrigation devices. A soaker hose is ideal for watering a garden or flower plot with little or no run off from this method.

If your barrel is white or light in color, you want to paint it. This will help reduce algae build-up. I have found Krylon Fusion paint for plastic adheres well. Or, just be creative and paint your barrels to match your homestead.

With a little research, you will find numerous ways to make and install these rain barrels, and use this free water. This presentation is just one way to construct rain barrels.

For me, this has been a fun, sometimes difficult, but quite rewarding project. At this time, I have two rain barrels connected to each of my gutters, giving me a total of 200 gallons of rain water. My potted plants are thriving have less salt or mineral build up in the soil. To further reduce dependency on well water, I also go to the rain barrels to wash tools, plant pots, or soil off my hands. I plan to connect more barrels in the future.

So, build a few rain barrels, have fun, and save water.

# **EQUIPMENT**

## **TOOLS**

Drill  
15/16" Paddle Bit  
2 1/4" Drill Bit  
Jig Saw  
Pipe Wrench  
Adjustable Wrench  
Utility Knife

## **MATERIALS NEEDED**

55 Gallon Barrel (food quality container)  
3/4" Spigot  
Concrete Blocks  
Flexible Downspout  
2" PVC Male Adapter  
2" PVC Elbows  
2" PVC Coupling  
2" PVC Pipe (length as needed)  
Goop or PVC Cement  
Piece of Screen for Gutter

## **LINKING MULTIPLE BARRELS**

2 Hose Repair Connectors  
Piece of Garden Hose

# **HOW TO MAKE A RAIN BARREL**

The following are basic steps on how to prepare and install rain barrels.

## **Step 1.**

Always use a food-grade barrel. Do not use barrels that have held chemicals.

Wash before using. A mixture of 1/8-1/4 cup of bleach per 5 gallons of water can be used to rinse the inside of the barrel.

If the barrel is light colored, painting will help reduce the build up of algae from the sun's rays. Krylon spray paint works well on plastic.

## **Step 2.**

Build a strong, level platform for the barrel. It is needed for both safety and the weight of the barrel once filled with water. The barrel will weigh around 400 pounds.

Concrete blocks (8x8x16) provide a strong, stable base for the barrel. If more than one layer is used, crisscross the blocks so they will not tip over.

The blocks must be level so the barrel will not lean.

## **Step 3.**

Trace the outline of the downspout or flexible tubing on the top of the rain barrel. Drill holes in each corner to provide access for the saw blade. Using a jig saw, cut on the traced lines to create the hole for the downspout.

## **Step 4.**

Drill a hole for the spigot using the 15/16" paddle bit. Drill the hole 4-6" from the bottom of the barrel.

Drill the hole for the overflow outlet. Use a 2 1/4" bit. Drill as near the top of the barrel as possible.

## **Step 5.**

The spigot, overflow and downspout will now be connected to the barrel.

Screw the spigot about halfway into the barrel. Make sure the threading goes in straight to avoid leakage. Apply a liberal amount of goop to the exposed threads and continue to screw the spigot until it is snug and pointing downward.

Next, screw the 2" PVC male adapter into the overflow hole. Again, make sure threading goes in straight. Goop is generally not needed as a little leakage is okay. It also makes it easier to disassemble for cleaning and maintenance.

### **Step 6.**

Position the barrel on the platform. Measure where the gutter will need to be cut or unscrewed. Using the flexible downspout extender, attach one end to the gutter downspout and secure. Insert the other end into the rain barrel. If there is leaf or pine debris that falls in the gutter, place a screen over the opening to keep it from entering the barrel.

Attach PVC elbow to the overflow adapter and a length of 2" PVC pipe which is needed to carry the water away from the foundation.

It is best to let the barrel set 24 hours before allowing rain to enter. This will give time for the glue to harden.

## **CONNECTING BARRELS**

There are various methods you can use to connect rain barrels. If you put the connector at the bottom of the barrel, only one spigot is needed. If the connector is put at the top, a spigot will be needed on each additional barrel.

Drill a hole using 15/16" paddle bit 4-6" from the bottom of both barrels making sure the hole is the same height on each barrel. This will decrease pressure on the connectors and a less likely chance of leakage.

Using a piece of garden hose, connect to the first repair connector. If the hose is difficult to slide onto the connector, put in hot water to soften hose. Tighten clamps around hose.

Screw this connector into the rain barrel about half way. Apply a liberal amount of goop and screw in tight. Screw in the other connector and also apply a liberal amount of goop.

Dip the end of the hose into hot water to make pliable, slide onto connector and tighten clamp around hose.

You can link as many barrels together as space allows.