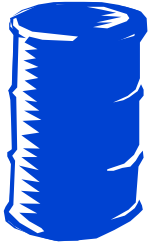


How to Make a Rain Barrel

In general, all but the barrel can be purchased at most hardware stores.

List of Materials:

1. The Barrel:



The barrel should be “food clean” plastic with a removable lid for cleaning and assembling. Barrels come in various sizes, the most common being 55 gallons. A heavy duty barrel works best, but a something as thin as a Rubbermaid trash barrel would work, just not as well. Barrels can be obtained from various sources, such as Food and Beverage companies and Barrel and Drum suppliers.

2. The Spigot & Hardware:



You will need a 3/4” hose bib spigot (1/2” will work but with smaller locknut and washer). These have male threads at one end to screw into the barrel and at the other to attach a standard size garden hose. You will also need a 3/4” galvanized locknut, a rubber washer with a 1” inner diameter, Teflon tape, superglue, and silicone sealant.

3. The Overflow Valve & Hardware:



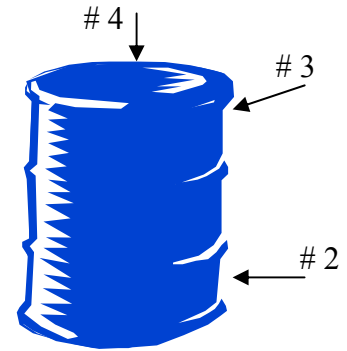
You will need a 3/4” brass overflow valve (plastic will work too) which has male threads on both ends with the outer end able to connect with the female end of a hose. These are called “male hose MIP adapter 3/4 X 3/4 X 1/2” “at Lowe’s and #A-665 at Home Depot. You will also need the locknut, rubber washer, Teflon tape, superglue, and silicone sealant.

Tools:

- Drill
- 1” hole saw or drill bit (use 15/16” for very secure fit)
- Utility knife
- Needle nose pliers or wrench
- Vegetable oil and cloth
- Screw driver and 6 screws (see # 14)
- Mesh screen for top filter

Making the Rain Barrel

1. Clean and rinse your food-clean container with a mild soap and water (rainwater if you have any yet)
2. Drill a 1" hole with your hole saw or drill bit, just off the bottom of the container for the spigot assembly. Put it as low as possible for easy maximum water use. It's designed to be on a stand; you can use 4 cinder blocks. Note: if you are unable to reach down to the inside bottom of the barrel, you might want to use a 15/16" bit and put the washer on the outside of the barrel.
3. Drill a 1" hole an inch or so below the rim for your overflow valve assembly. This hole can go anywhere around the barrel at that level. Keep in mind: don't put it too close to the top (overflow) or too low (lose water storage). Please note that if you have a 2,000 square foot roof and large downspouts, you may want to get a larger overflow valve.
4. Use the 1" drill bit to make a dozen or so holes in the lid, Rainwater will filter through the mesh screen then through the holes into the barrel.
5. Take the utility knife to clean scraps from around the holes.
6. Wrap the barrel end of the spigot three times around with Teflon tape and then screw in the spigot squarely. It should go in by hand.
7. Take the rubber washer and glue the surface of one side with strong glue and reach into the barrel and work it over the threads, flush with the barrel side.
8. Screw on the locknut and finish tightening by turning the spigot while holding the locknut with a wrench or pliers. You may need a second person to turn while you hold.
9. Wrap the longer end of the overflow valve with Teflon tape three times and then screw it into the overflow hole by hand, or use a wrench or pliers if necessary. The outside male threads should be able to connect with a standard size garden hose to divert the overflow.
10. Repeat step # 7 above.
11. Screw on the locknut as far as possible by hand on the outside threads. Then hold the locknut while tightening overflow valve with wrench or pliers until it is very tight.
12. Take a tube of all-purpose silicone sealant and apply a bead where overflow valve meets the outside of the barrel. Note: If you have a secure seal, this step may not be necessary.
13. Repeat step #12 on the spigot assembly.
14. Trace the outline of the lid on a mesh fiberglass screen and then cut it out. Screw on, if necessary, or just tighten ring around cap to secure. This screen is designed to keep mosquitoes out.
15. Take the cloth and vegetable oil, and apply it to the scratched areas of the barrel to clean and shine it up.



Installing the Rain Barrel

1. Position the rain barrel adjacent to a downspout and remove enough of the downspout (with a hacksaw) so that there is ample room to attach a 45° elbow while still allowing the rain barrel to easily fit underneath with approximately 2" of clearance.
2. Your rain barrel must be secured on a raised, level surface (like concrete blocks or pavers). A full, 55-gallon rain barrel weighs over 400 lbs. which makes tipping is a risk if it is unsecured or on uneven ground.
3. Divert your overflow to a safe discharge location away from your home's foundation.
4. The barrel must have a lid and a fine mesh screen covering any openings to prevent mosquitoes and debris from getting inside.
5. Do not use moss control or other chemicals on your roof that are not garden safe.
6. NEVER use water from the rain barrel for drinking, cooking or other potable uses.

Maintaining the Rain Barrel

1. Periodically brush the fine mesh screen to prevent debris accumulation
2. Empty your rain barrel prior to each rain event to avoid stagnant water