

Create a Rain Barrel Collection System

By Alisa Kane



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

Collecting the rain that rolls off your roof to use in the garden preserves natural resources and saves money on your water bill. One affordable way to capture hundreds of gallons of rainwater every year is to make and install rain barrels from simple plumbing fixtures and recycled food grade containers.



Figure 7

Instructions

Depending on the type of barrel and location of your downspout, determine how you will route water from the downspout into the barrel. If your barrel does not have a screw-off lid, there is a plastic downspout adapter and flexible gutter attachments that can be purchased that will help transition the downspout into the screw plug (or bung) on top of the barrel. Search the Internet for examples of different ways to outfit your particular rain barrel.

The following instructions are for use on an open top container with a removable lid and screw ring for closure.

1. Use a 1" spade bit to drill approximately 15 holes in a circular pattern into the top of the lid (figure 1). Cut the screen material to fit over the lid and then sandwich the screen netting between the lid and the barrel (figure 2).
2. Straddle the barrel on its side so it cannot roll. Create an opening for the overflow spigot by drilling a 1" hole into the side of the barrel, approximately 4" down from the top (figure 3). Swivel the barrel approximately 3/4 turn. Drill another 1" hole for the water-dispensing spigot approximately 3" to 4" from the bottom of the barrel.
3. Wrap the threads of both hose bibs with Teflon tape, then wind ends into the holes, placing a washer between the spigot and the outside of the barrel. Reaching into the barrel (figure 4) spread a bead of silicon around each opening and secure the hose bibs with a washer, then a locknut. Gently tighten the locknuts with an adjustable wrench to secure the hose bibs.
4. Level two concrete blocks underneath the downspout (figure 5). Remove square shoe (if applicable). Mark where you will need to trim the downspout (with or without square shoe) so it sits approximately 2" from the top of the barrel. Trim downspout with hacksaw. Reattach square shoe to downspout and secure to house with clincher strap. Use extra blocking to support the downspout if it sits away from the wall.
5. Install rain barrel under downspout, making sure that the barrel is level and comfortably sitting on both blocks (figure 6).
6. Attach hose section to overflow spigot, turn to the "on" position, and direct hose end away from foundation (figure 7).
7. After rainfall, fill watering can using the bottom spigot. Water plants at will and enjoy the free water!

If you don't feel like making your own? There are several local manufacturers and suppliers that sell pre-fabricated rain barrels. Try Portland Rain Barrel Company at www.portlandrainbarrels.com or The Urban Rain Barrel™ at www.urbangardencenter.com.

Supply List

Most of these items can be found at plumbing/hardware stores, such as [A-Boy](#) or [Winks](#). One 50 to 55-gal food grade plastic barrel (can be found on [Craigslist](#) or restaurant suppliers). Two hose bibs with 3/4" threaded inlet and 3/4" male hose end. Two 3/4" galvanized locknuts to secure spigot from the inside of the barrel. Four 1" (opening) washers to provide rigid surface to fasten hose bib. Six 1' or longer section of garden hose with female end. Teflon tape, silicon adhesive, two 8" x 8" x 12" concrete blocks, window screen netting (enough to cover the barrel top), downspout adapter, square shoe (directs water to splash block), elbow, or flexible gutter attachment (to route the downspout to the barrel), clincher strap (attaches downspout to house), small pieces of wood blocking to use behind clincher strap (if necessary).

Tools

Drill, 1" spade bit, tin snips or heavy-duty scissors for cutting screen, hack saw for trimming downspout, adjustable wrench with at least 1" capacity, utility knife, safety glasses.

Tips

Make sure your design keeps mosquitoes, pets, and children out of the water.

The water from the rain barrel should never be used for drinking.

Direct the overflow hose away from your foundation.

Clean out the water and check the rain barrel for leaks at least once a year.

During cold weather, you may want to drain the rain barrel and direct the water away from the house using a flexible downspout attachment.

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