How to Build and Install a Rain Barrel

Capturing and storing rainwater for your landscape can help you save money, improve the health of your plants, reduce the effects of stormwater runoff, and save water. Constructing and installing a rain barrel can be a simple and inexpensive project. Check out the tips and instructions below on how to install a rain barrel in your home landscape!

Safety disclaimer: Ensure that all of the proper safety measures are taken prior to installation of the rain barrel. When drilling or cutting, wear safety goggles, heavy duty gloves, and optional long sleeves to prevent cuts on your hands and arms, or from debris or particles entering your eyes.

Supplies:

Tools:
- Drill
- 1” hole saw
- Hack saw (to cut down spout)
- Reciprocating saw (to remove top if needed)

Materials:
- Reconditioned food grade drum or barrel
- ¾” male threaded spigot seal
- Spigot
- Flexible downspout attachment for gutter
- Pvc pipe reducer (optional)
- Concrete blocks for support
- Mesh screening (if removing top)
Installation:

1. If using a recycled plastic food grade barrel, ensure that the barrel is empty of any excess liquid and rinsed. **DO NOT** use any container that contained toxic chemicals, petroleum, or pesticide. Barrels can be cleaned with vinegar and water, or combination of 1/8 cup of bleach in 5 gallons of water.
2. Drill hole using a 1” hole saw about 3-6” from bottom of the barrel.
3. Fit the flexible threaded spigot seal snug into the drilled hole.
4. Twist spigot into the flexible threaded spigot seal at bottom of barrel.
5. (If you have a downspout) Use a PVC pipe increaser to fit the flexible downspout into the existing bung hole. Bung holes are varying sizes so it is best to take the cap with you to the store to insure proper fit when purchasing materials.
6. (If you do not have a downspout) No rain gutters, the top of the drum can be removed using a reciprocating saw. Place mesh screening over the opening and secure with a UV-stable rope to prevent mosquitoes and debris from entering barrel.
7. Pick a location for your rain barrel close to a downspout or where water channels off of the roof. Level the ground prior to installing the base.
8. Build support base of 8” X 8” X 16” concrete blocks to provide an elevated and stable base that will support the weight of the barrel and offer better gravity feed.
9. Place rain barrel on concrete base.
10. (If you have a downspout) Measure and mark downspout at appropriate location depending on the height of the rain barrel on the concrete base and the flexible downspout. Use a hacksaw to cut the marked portion of the aluminum downspout.
11. (If you have a downspout) Connect flexible downspout to gutter downspout.

Optional:

1. Increase drainage by using a ½” drill bit to create holes at an angle approximately 6” apart on the top of the rain barrel. This allows water to flow off of the sides and prevents the small pooling of water at the top of the rain barrel.
2. Drill additional hole approximately 5 inches from top of barrel to insert an overflow pipe (at least 1” pipe) to connect to additional rain barrel(s). Linking kits are available for purchase if connecting two or more rain barrels. If not connecting to another rain barrel, divert overflow pipe away from foundation from house.
Pictures of Installation Supplies and Materials

Tools:

- Reciprocating saw
- Hack saw
- Drill
- 1” hole saw
Materials:

- Flexible downspout
- PVC pipe reducer
- Spigot
- Threaded spigot seal
Mesh screening

Concrete block base

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