

How to Build and Install a Rain Barrel



What is a Rain Barrel?

A rain barrel collects and stores rainwater from your rooftop to use for watering lawns and gardens. Water collected in a rain barrel would normally flow through your downspout, onto a paved surface, and eventually into a storm drain.

Why Use Rain Barrels?

- ◆ **Save \$\$\$!** Lower water and sewage bills by using FREE rainwater.
- ◆ **Reduce the amount of stormwater runoff** entering local rivers and streams along with associated pollutants such as oil, sediment, chemicals and bacteria.
- ◆ **Conserve water** during hot, dry summer months.
- ◆ Storing rainwater for garden and lawn use helps to **recharge groundwater**.
- ◆ Soft, chlorine-free water for greener gardens — **plants prefer rain water!**

INSTRUCTIONS

STEP 1 Cut holes in Barrel

- ◆ Cut lower drain hole opening using 1 1/4" bit or hole saw
- ◆ Cut upper drain hole according to where you want the overflow to be located (*back, side, front of barrel*). Use a 1 1/4" bit or hole saw.
- ◆ Cut top hole for atrium grate in the center of the barrel using a jig saw or 4" hole saw.

STEP 2 Set up barrel and modify downspout

- ◆ Place barrel on flat, level surface. If desired, use cinder blocks or other sturdy material to raise the barrel off of the ground. This will increase water pressure and allow space for a watering can to slide underneath the spigot.
- ◆ Modify your downspout by cutting the existing downspout with a hack saw to a height which will accommodate the barrel. Attach a gutter elbow or use a downspout adapter and 4" corrugated pipe to route water into the barrel. *You may want to save the cut piece of downspout to reconnect the gutter during the winter months if you choose to unhook and store your barrel.*

STEP 3 Assemble parts

- ◆ Screw one of the 1" x 3/4" bushings into the lower hole. Unscrew, then wrap tightly with Teflon tape and finish with waterproof sealant (required). Screw bushing back in tightly but avoid stripping the hole in the barrel.
- ◆ Immediately screw spigot into bushing in lower drain hole. Teflon tape and waterproof sealant are recommended for this connection. You should hold bushing in place with a pair of pliers while screwing in the spigot to avoid stripping the hole in the barrel. Allow sealant to dry for 24 hrs.
- ◆ Screw the other 1" x 3/4" bushing into the upper drain hole. Unscrew, then wrap tightly with Teflon tape and finish with waterproof sealant. Screw the bushing back into the barrel and allow to dry for 24 hrs.
- ◆ Slide the 5' section of garden hose over long end of coupler and adjust/tighten screws on the hose clamp as needed. Screw coupler into bushing. Waterproof sealant is recommended. Allow to dry for 24 hrs.
- ◆ Drop atrium into 4" hole and line with screen. Secure screen with sealant if desired.
- ◆ Position gutter elbow so that it drains into atrium grate or fit 4" corrugated pipe directly onto the atrium.

SUPPLIES

Parts

- ◆ A 55-gallon drum
- ◆ One 4" diameter atrium grate
- ◆ One 3/4" brass spigot/hose bib
- ◆ 5' section of 5/8" garden hose
- ◆ One 5/8" x 3/4" male coupler (*used for garden hose repair*)
- ◆ Two 1" x 3/4" male threaded bushings
- ◆ Fiberglass window screen or mosquito netting
- ◆ One gutter elbow or downspout adapter with 4" corrugated drain line.

Tools

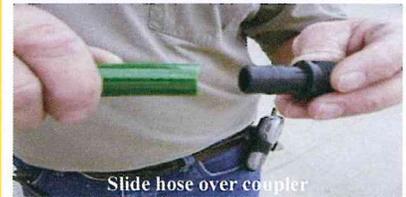
- ◆ 4" hole saw
- ◆ 1 1/4" hole saw or bit
- ◆ Drill
- ◆ Measuring tape
- ◆ Hacksaw
- ◆ Screwdriver
- ◆ Pliers

Other

- ◆ Teflon tape
- ◆ Waterproof sealant
- ◆ 1-2 cans spray paint (optional)
- ◆ Cinder blocks or landscaping blocks (optional)



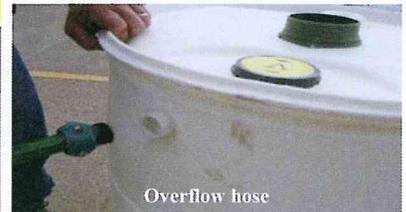
Attach spigot to bushing



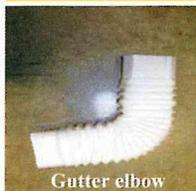
Slide hose over coupler



Tighten hose clamp



Overflow hose



Gutter elbow



4" corrugated drain line



Downspout adapter



4" atrium grate



west virginia department
of environmental protection

Rain Barrel Parts List

Barrel Parts



Two 1" x 3/4" male thread/female thread bushings



3/4" hose bib (spigot)



5/8" x 3/4" male coupler (for garden hose repair)



4" atrium grate



5' section of 5/8" hose



Fiberglass screen or mosquito netting

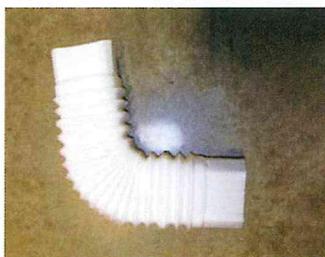


55-gallon food grade plastic barrel



Overflow and Downspout Modification Parts

Overflow and downspout modification parts will vary depending on your needs and preferences



Downspout elbow



4" corrugated drain pipe



Downspout adapter



west virginia department of environmental protection