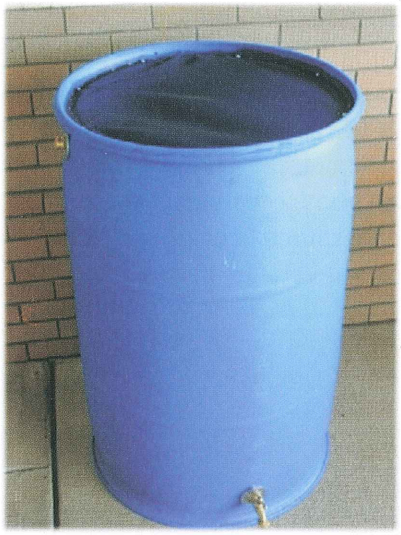
Rain Barrel Construction



Single Rain Barrel

Daisy Chain Multiple Rain Barrel System

Tools Required

- Jig-Saw
- Drill
- 1" Drill Bit (spade bit will work but a regular bit bores a smoother hole)
- 1 ¼" Drill Bit for Multiple Barrel Systems ONLY
- Crescent Wrench and/or a 1 1/16" Deep Socket and Wrench
- Staple Gun
- Scissors or Utility Knife
- Hacksaw

Parts List (Single Barrel)

- Food-Grade Plastic, 55 gal. Barrel
- ¾" Hose Bibb (MIP Threaded Inlet) (Plastic or Brass Spigot)
- ¾" X ¾" Pipe to Hose Connector
- (2) Large Washers (1" I.D. to fit over Hose Bibb)
- Fiberglass Window Screen Material
- Brick or Cement Block
- Teflon Tape (Plumber's Tape)
- Silicone (Kitchen and Bath)

Parts List (Double Barrel)

- (2) Food-Grade Plastic, 55 gal. Barrel
- (2) ¾" Hose Bibb (MIP Threaded Inlet) (Spigots)
- ¾" X ¾" Pipe to Hose Connector
- (3) Large Washer (1" I.D. to fit over Hose Bibb)
- (2) PVC 1" MIP Adaptors
- (2) 1" PVC Elbow Insert
- 2' Vinyl Tubing (1 ¼" diameter) to connect Barrels
- Fiberglass Window Screen Material
- Brick or Cement Block
- Teflon Tape (Plumber's Tape)
- Silicone (Kitchen and Bath)

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All parts with a possible exception of the barrel can be purchased at Orscheln Farm and Home

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BARRELS

- If you are using a used 55 gallon barrel, make sure to wash it out even though food products were the only stored items.
- Barrels can be purchased new or used from several locations. The cheapest place to buy barrels is directly from food or juice processing plants. Companies such as Hogeye Rentals are a good, consistent source of used food grade barrels. Orscheln Farm and Home Supply in Springdale is a seasonal source of already cleaned, used barrels. Orscheln's sells two types of barrels, a terra cotta barrel that comes with an installed ½" water spigot and a removable top, and a white barrel with a molded top and no spigot. Industrial strength 44 gallon trash containers may be used if barrels are hard to track down.

Hogeye Rentals	*www.hogeye.biz*	*479-846-3664*	*12649 Hwy 265 S.*
Orscheln Farm and Home		*479-750-9967*	*516 E. Emma Ave.*

IMPORTANT – Make practice holes in the section of lid that will be cut out to make sure that your spigot, brass adaptor, and PVC adaptor (2-barrel system) will fit properly. This could prevent a lot of wasted time and material.

Step 1: Preparation

Mark all cuts and holes to be drilled on your clean 55 gallon barrel. The overflow hole on either side of the barrel should be at least two inches from the top edge of the barrel. The spigot hole should also be 2-3 inches from the bottom edge of the barrel. You can make the daisy chain connector hole (optional) 8 to 12 inches above the bottom of the barrel for a multiple barrel system.

Step 2: Cutting and Drilling

Cut the top off of the barrel using a jig saw. Make sure to leave at least 1" of the top to secure mosquito netting later. At this point, you have already drilled at least one test hole in the top of the barrel to make sure that your spigot will fit. This hole is where you can start your jig-saw. Drill the spigot hole and overflow/daisy chain connector hole with your 1" drill bit. If you did not purchase or have a one inch drill bit, a 15/16" spade bit will be your next best option. Spade bits do not bore as clean of a hole as a drill bit. Using a 15/16" instead of a 1" spade bit allows for some error in the drilling process, but makes the fittings harder to insert properly. Use a 1 ¼" drill bit to drill the hole for the daisy chain PVC connecter fitting. This is where your practice hole(s) come in very handy! If you have shavings or burrs on the edge of your hole, use a utility knife or other sharp edge to clean the plastic burrs from all holes.

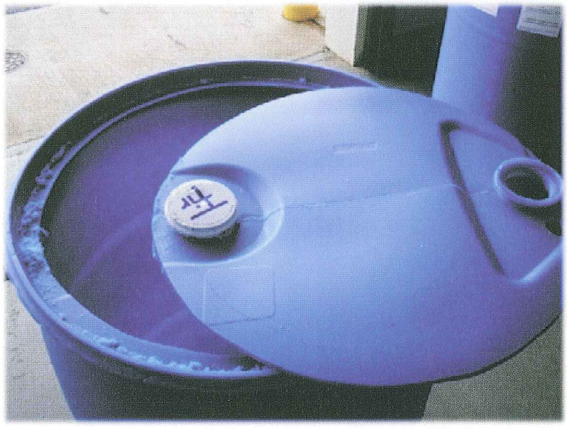

Figure 1. Cut top of barrel at least 1" from edge.

Figure 2. Drill spigot and overflow holes.

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Step 3: Inserting Fixtures and Fittings

Use a washer on the outside of the barrel (figure 3), between the barrel and the spigot and overflow adaptor to hold extra silicone and to give more support to the fitting. If making a multiple barrel system, screw the PVC elbow onto the PVC adaptor from the inside of the barrel (figure 4). Wrap the threads of the brass fittings with Teflon tape. Be liberal in the application of silicon both on the threads of the fitting and under the washer to help with support and waterproofing. The Teflon tape and silicone can help to prevent leaks. Next insert the spigot and hose adaptors and turn until tight (**do not over tighten**).

Figure 3. Teflon tape and silicone around all fittings.

Figure 4. Screw the elbow onto the adaptor for added support. (multiple barrel only)

Step 4: Screening the Top of Your Barrel

Cut your fiberglass screen large enough to cover the entire top of your barrel. Staple one edge of the screen to the rim of the barrel. Stretch the screen fairly tight and staple the screen to the opposite side of the barrel. Work your way around the rim of the barrel keeping the screen tight as you staple. Trim off the excess screening material with a utility knife or scissors to give it a clean appearance.

Figure 5. Attach fiberglass screen to the rim on the top of the barrel using a staple gun.

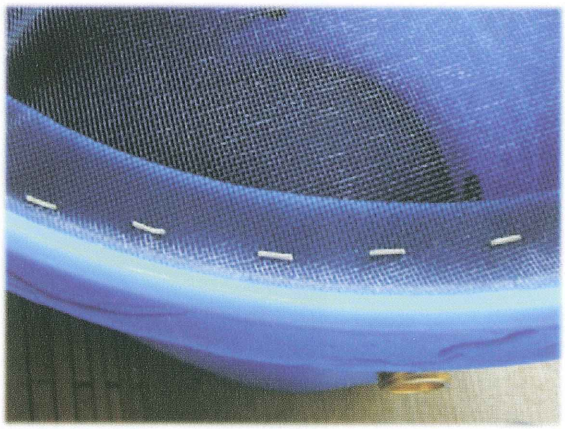

Figure 6. Cut excess screen with utility knife or scissors.

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Step 5: Installing Your Rain Barrel

Your rain barrel needs to be raised above the ground to provide enough head pressure to water your plants. This watering system works by gravity. Many times people use concrete blocks or landscape blocks to raise their rain barrels off of the ground and provide lift. Once you know the height of the barrel, it is time to cut the downspout. Disconnect the elbow at the bottom of your downspout. Hold the disconnected elbow up to the downspout to mark where to cut the downspout to provide at least two inches between the elbow and the rain barrel so that the barrel can be easily removed for future maintenance. Cut the downspout at the line and reconnect the elbow to the downspout.

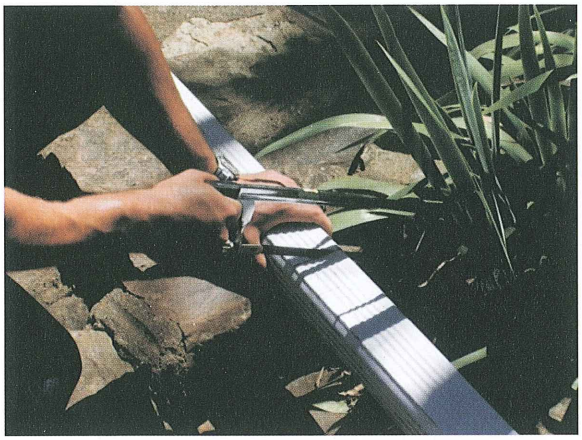
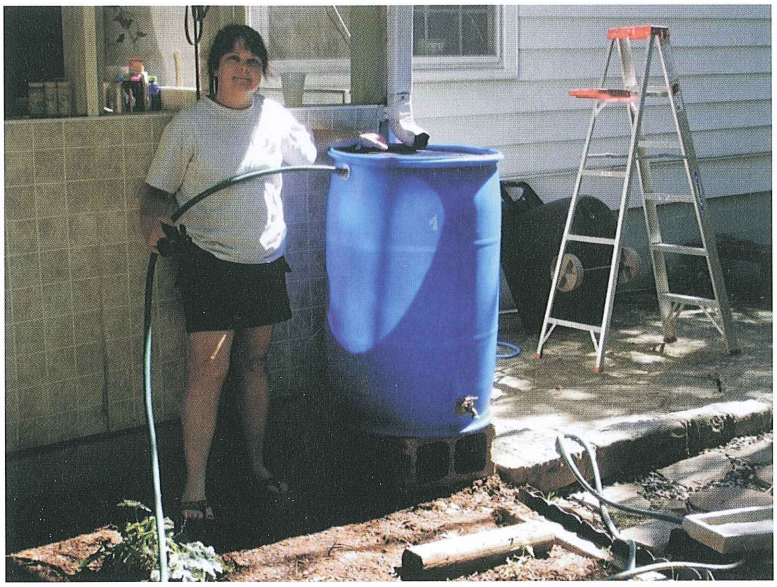


Figure 7. Remove downspout and cut it at the appropriate length.

Figure 8. Re-install the downspout and connect elbow to direct water into barrel.



ENJOY YOUR NEW RAINBARREL!

Remember to use a short section of hose to divert your overflow to an area that is resistant to erosion. No hose will cause an area of erosion where the overflow shoots out onto the ground.