



Timely Information Sheet

Constructing a Rain Barrel

Supply List

- 55 gallon barrel (color other than clear or white is preferred to prevent algae growth)
- $\frac{3}{4}$ " faucet
- $\frac{3}{4}$ " PVC T fitting with female threads on one bottom of T
- $\frac{15}{16}$ " drill bit
- O Ring Washer to fit $\frac{3}{4}$ " faucet
- Cinderblock (optional for raising barrel off the ground)
- 3" or 4" PVC Pipe (S&D type)
- Two 3" or 4" PVC Pipe 90 degree fittings
- Aquatic Plant Basket (9" or larger)
- Plastic spray paint (for painting clear or white barrels or to change color as desired)
- Flexible downspout extension
- Insect screen (for mosquito exclusion)

Installing Faucet

Drill a hole 6 inches from bottom of the barrel.

With the wood boring drill bit, drill slowly, so you will not damage the circumference of the hole.

Use a $\frac{3}{4}$ " tap tool to make threads. Make threads slowly and in a level position or your faucet will be at an angle and the T with washer on the backside will not tighten flush and a small leak may result. It is possible to thread the faucet without making threads with tap tool but a small leak is more likely and you will need to use a 1" bit instead of the $\frac{15}{16}$ " bit.



Carefully thread the faucet into the tank (use pipe Teflon or pipe sealant compound on the threads). You should allow $\frac{1}{2}$ " or more of the threaded faucet nipple to protrude into the inside of the barrel. Reach in and install the rubber "O" ring and threaded T to hand tight (of course this step will be

done after the top cut is made unless the barrel has a removable lid). It is not recommended that you over-tighten this, as you will stretch the “O” ring.

The Lid

Cut the top entry hole to the desired size and shape by drilling pilot holes at the corners and use a ruler to make straight lines. Use the aquatic plant basket to determine the hole size to be cut. The two most used sizes are 9” and 12” but this is not critical. However, if the lid of the barrel does not remove use the larger basket size to gain easier access to the inside of the barrel to attach the washer and T. Cut hole about ½” to 1” smaller than the top of basket size to allow basket to seat in the hole but not fall through. For added security against mosquitoes line the basket with plastic insect screen.



Overflow

You must have an overflow hole for excess water which will be needed with any significant rainfall event. The most important thing to have is an overflow as large as the gutter downspout size. In other words if the downspout is 3” x 4” the exit hole should be of that approximate capacity even if shaped differently. Most home downspouts would need a 3” round hole or larger.

The overflow should be located about 6” from the top of the barrel in the position you wish to divert the overflow water. This is usually to the point the original downspout exited prior to the rain barrel installation. Drill or cut the hole to the desired size based on the pipe size being used. For 3” S&D PVC pipe use a 3 ¼” lockset type drill bit (like the ones used to drill a hole for a door knob but somewhat larger).

Cut a piece of 3” S&D PVC pipe about 3” long. Place the 3” section through the drilled or cut hole with one half of the pipe inside and the other half protruding out. Using PVS glue attach one of the 3” elbows inside the barrel and the other on the outside. The inside elbow should point up and the outside elbow down. If the fit is not tight against the inside and outside of the barrel use some silicone caulk to seal potential leaks.

You may then attach a drain pipe to the outside elbow and direct the excess flow wherever desired (possibly a nice rain garden). On the inside elbow attach a small piece of screen with a zip tie or clamp to exclude mosquitoes.

Installing Your Rain Barrel

Position your rain barrel on level ground in front of a downspout close to the garden you wish to water if possible.

Ideally the rain barrel would be raised up on cinder blocks so that you can get a watering can under the faucet. The higher you can get it the more water pressure you will have. If you do this, make sure the ground is firm and blocks are level.

Cut the downspout (a hacksaw works well for both metal and plastic downspouts) a couple of feet above the top of the barrel.

Remove the lower section of the downspout and slide the barrel into the permanent position.

Attach a downspout flex extender (as shown above) to the downspout and place the other end into the aquatic plant basket.



Tools Needed

Electric or battery powered drill
Ruler
 $\frac{3}{4}$ " tap tool to make threads (optional)
Scissors (to cut screen)
Jig saw
Hacksaw

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