



## PLASTIC RAINBARREL INSTALLATION TIPS

### Howdy

Congratulations on your new rainbarrel! This sheet will provide you with some tips on installing and using your new rainbarrel to ensure that it serves you well for many years to come.

#### TYPICAL RAINBARREL INSTALLATION



### CONTACT INFORMATION

*Want to ask a tough rainbarrel installation question?*

Send an email to [rainbarrels@grinningplanet.com](mailto:rainbarrels@grinningplanet.com)

*Want more barrels (or know someone who wants one)?*

If you would like to order another rainbarrel or have neighbors/friends who are interested, please call Sustainable Berea at (859) 985-1689.

### Installation Tools and Supplies

The supplies and methods listed here are for a basic, low-cost installation. Other types of more decorative stands are possible---for instance, constructed from pressure-treated lumber or from landscaping blocks, mortared and filled with gravel. Just make sure your stand will support at least 425 pounds, which is the weight of the plastic barrel + water.

#### Supplies you'll need for the basic stand and installation:

- 8 cinderblocks (8" x 8" x 16")
- 1 downspout elbow
  - you need an elbow the same size as the one that's on your downspout now
  - if the existing elbow is in bad shape, you may need to replace it too
- 6 small sheet-metal screws (preferably weather-resistant)
- two or three 50-pound bags of gravel

#### Tools you'll need:

- garden rake
- 2-foot level
- hacksaw (and possibly metal snips)
- screwdriver (for the sheet-metal screws)
- drill with a bit sized for the sheet-metal screws

### Installation Steps

#### 1. Plan the Downspout Cut

Remove the elbow from the downspout where the rainbarrel will be installed. Using a hacksaw (and metal snips, if necessary), cut off the downspout at about 4 feet from the ground. (This is a temporary cut; you'll do the final cut later.) Attach the old elbow to your new elbow to form an S-shaped double-elbow.



Now you need to figure out how much drain pipe fits inside the end of an elbow:

- a) Slip the double-elbow onto loose, cut-off piece of downspout.
- b) Make a mark on the cut piece of downspout where it disappears into the double-elbow.
- c) Remove the double-elbow and measure how much downspout pipe was inside the double-elbow. We'll call this measurement the "insert distance." Make a note of it for future reference.

## 2. Level the Area

Level the area where the rainbarrel will sit. If the ground is overly sloped, you may need to dig out a little to get it closer to level. Ideally, the ground itself should slope slightly away from the house to foster proper drainage of overflow water.

Next add enough small-size gravel to allow you to smooth the area and achieve a truly level surface (from side to side *and* from front to back). Use a level to check. Left to right, your base area should be centered on the downspout. Typically, you'll want the gravel to be a few inches thick.

However big the perimeter of your graveled area is—this will vary slightly, depending on the topography of the area you started with—you want the level part of the gravel area to be at least 3 feet by 3 feet.

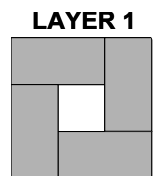
### A NOTE ABOUT THE GRAVEL AREA

Though a 3' x 3' gravel area will be enough to accommodate the cinderblock base, which is 2' x 2', it's usually a good idea to extend the graveled area by a foot or two in front. That's where the drain is, so extending the leveled area allows you to properly set a watering can or bucket in front of the rainbarrel for fill-up. Similarly, you'll want to leave the can or bucket in that position most of the time and stick the end of the overflow hose into it so you can catch a little bit more rainwater once the rainbarrel is full.

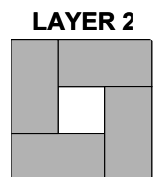
## 3. Add Cinderblocks

The reason you want to install your rainbarrel on a raised base is to get it high enough that you can slip a bucket or watering can under the drain. The height will also give you enough elevation differential that you should be able to drain the barrel through an attached hose (though you won't have nearly as much water pressure as you get from your city tap). The method presented here will use cinder blocks, though other methods are possible.

Arrange the first layer of four cinderblocks on the gravel to form a 2-foot by 2-foot base. The "holes" can point up or sideways; that's not important for this particular installation. Left to right, the base should be centered on the downspout. Front to back, the base should normally be an inch or two from the house wall.



Make sure the first level of cinder blocks is level front to back and side to side. Also make sure that the tops of the blocks make a fairly flat surface (relative to each other). Then add a second layer of cinderblocks, alternating the pattern relative to the first layer (see diagram). Again, make sure this layer is level and flat.



Take your time with Steps 2 and 3. Setting up a solid, level base will save you the later heartache of watching your barrel turn into the Leaning Tower of Rainwater!

## 4. Check Position, Install Downspout

Place your rainbarrel on the cinderblock pedestal, positioning it so the barrel is in the center of the base and the inlet hole in the top of the barrel is to the rear and centered (left to right) on the downspout. Hold the double-elbow up against the downspout and eyeball whether the barrel is positioned properly front-to-back so that the inlet hole will be under the exit of the double-elbow once the latter is installed. Positioning the barrel *slightly* off-center on the base to achieve inlet alignment is acceptable, but if it's off-center by much, you'll need to reposition the cinderblocks. If the double-elbow doesn't stick out far enough to end up over the inlet opening, you may need to insert a short section of downspout between the elbows to get the exit further away from the wall. Also make sure the barrel's drain (hose bibb) sticks out past the front edge of the cinder blocks so you'll have access.

Once you're sure the positions of the base, barrel inlet, downspout, and drain are all good, again hold the double-elbow up against the downspout, leaving a couple of inches between the bottom of the double-elbow and the inlet screen. Make a small mark on the downspout at the top of the elbow. Measuring from that mark downward, add the "insert distance" from Step 1 and make your cut mark there. Use a hacksaw and/or metal snips to cut the downspout at the cut mark. Slip the double-elbow over the downspout. (Be careful of sharp edges!) Everything should now be in perfect position. Put a screw in the left and right sides of all downspout joints.

## 5. Finish Up

Make sure the drain on your rainbarrel is closed. Place a watering can or bucket in front of the rainbarrel and put the overflow hose in it. Voila! You are now in the rainwater harvesting business.

### **VERY IMPORTANT**

1. Freezing is the enemy of your rainbarrel. Once hard freezes become a possibility in the fall, "mothball" your rainbarrel for the season. That usually means just leaving the drain open so water won't accumulate in the barrel, but you could also remove the rainbarrel from the base and put a piece of flexible drain hose on the double-elbow to guide water away from the house. Just leaving the drain open should be enough, but you must do at least that—if water freezes in the rainbarrel and/or drain, your barrel could be damaged. Reverse your process in the spring, once the danger of freezing is past.
2. If you attach a hose to the drain, be careful not to jerk the hose in a way that will strain the drain. Open and close the drain valve gently. Do not hang a pail on the drain to fill it.
3. As debris from the downspout accumulates on the inlet screen, it will need to be cleaned occasionally. When removing and reinstalling the cover, be careful not to push your thumbs or fingers into the screened part—doing so may separate the screen from its frame.