Rain Barrel Set-Up

Supplies: Most supplies are available at your local hardware stores.

- Two 55 gallon food grade drums with bungs (available locally from All Valley New & Used 360-854-2006 & Skagit Farmers Supply/Country Store/Cenex 360-424-4207)
- One ¾" hose bib (faucet)
- Teflon tape (to wrap pipe threads)
- Window screen to cover reducer to keep mosquitoes out and avoid potential for West Nile virus
- Bench, PVC cement
- One ABS 4" to 3" reducer (looks like a black funnel) with 4" hose clamp holding on window screen
- Two ¾" hose clamps
- Two ¾" male adapters with barb (MPT x barb)
- Three ¾"male adapters (MPT x S)
- Three 90 degree ¾" elbows (S x S)
- Standard ¾" PVC pipe
- One female adapter (FPT x S)
- One conduit sleeve for ¾" PVC pipe
- One 6" nipple (MPT x MPT)
- Two 3" nipples (MPT x MPT)
- One ¾" polyvinyl tube
- One ¾" PVC tee (S x S x S)
- Earthquake straps (not used here) or plumber's tape (3/4" wide, 22 gauge for securing pipes)

Please Note: the length of the ¾" I.D., 1" O.D. PVC pipes to be determined by installation and location of rain barrels; PVC fittings are either: S=Slip (socket or nonthread), FPT=female pipe thread, MPT=male pipe thread.

Instructions: For equipment you will need a drill with a ½" drill bit, ¾" and 1" spade bit, PVC pipe cutter, box cutter or saw or knife of your choice, pencil, tape measure, level.

(Images are located on pages 4, 5 and 6.)

1. Select the "bung" (threaded plug) you will be using for the piping, making sure it has the correct size threads to match the PVC pipe (3/4" in this case). Use a ¾" spade bit and drill out the hole. Do this for each barrel. Insert 3" nipple, then ¾" male adapter (MPT x S), then standard ¾" PVC pipe, then ¾" PVC elbow (S x S), then ¾" PVC pipe. **(Image 1)** Do this for each barrel. Turn the barrels upside down (the bottom will now become the top) and place on bench **(Image 2)**. Attach both PVC pipes to ¾" PVC tee **(Image 3)**. Then insert ¾" PVC pipe **(Image4) (image5)**, then female adapter (FPT x S), then standard ¾" hose bib **(Image 6).** Secure nipple to underside of bench with conduit sleeve **(Image 7)**.*

2. Cut or drill inlet hole so it's centered under the downspout **(Image 8)**. Make the hole 3" in diameter to fit the ABS 4" to 3" reducer **(Image 9)**. (A pencil was used to trace the hole, then a ½" drill bit was used to make holes inside of the tracing and then a box cutter was used to trim the hole.) Insert ABS 4" to 3" reducer (looks like a black funnel) **(Image 10)** with 4" hose clamp holding on window screen **(Image 11) (Image 12)**.

3. Drill 1" hole near top of each barrel top, both holes facing each other. Insert ¾" male adapter with barb (MPT x barb) into each hole. Place hose clamps over ¾" polyvinyl tube and apply to adapters. To make polyvinyl tubing more pliable over adapters, you can dip ends in hot water for a few minutes before applying.
   Tighten hose clamps over tubing, over adapters **(Image 13)**.

4. Drill 1" hole near top of one barrel for overflow pipe. Insert ¾" male adapter (MPT x S), then ¾" PVC elbow (S x S), then standard ¾" PVC pipe to be used for overflow **(Image 14)**.

*If both PVC pipes were connected to a tee and connected to one hose bib, as in step #1, then step #3 can be completely eliminated because both barrels were all ready combined in step #1. Step #3 was included to show how each barrel would need to be attached to each other in case someone wanted to have a hose bib attached separately to each barrel. One hose bib was used in this case to reduce costs. Either set up allows you to connect multiple barrels.

Safety Concerns:

For added safety, apply earthquake straps to each barrel and apply to wall of building. This was not done here. A barrel full of water weighs over 450 pounds! Never store drinking water in these barrels, use five gallon containers specifically designed for this purpose.

Most moss killer is a poison. After applying moss killer to your roof, wait for at least three heavy rain storms to start collecting roof rain water, but be cautious and test on a few plants before using on all plants.

Rain water should not be collected from new roofs or roofs where any preservatives were applied. Waiting one winter season is recommended in these cases.

As stored rainwater contains a host of contaminants, do not let children play in it or drink from it. Only under the most extreme disaster conditions should rain barrel water be consumed by humans, pets or livestock. Rainwater passing through your gutter is exposed to bird droppings (E. coli) and decaying plant and animal mater. If there is no other source of clean uncontaminated drinking water, strain the collected rainwater through tightly woven fabric such as sheeting and boil for five minutes (rolling boil) prior to consumption.

Finally, although the barrels are rated as food grade quality, they may have had solvents and/or chemical cleaners used to clean them and other products may have been stored in them before you obtained them. Keep in mind these barrels are a recycled product and are not sterile.

Image 1

Image 2

Image 3

Image 4

Image 5

Image 6

Image 7

Image 8

Image 9

Image 10

Image 11

Image 12

Image 13

Image 14