Homemade Rain Barrel
Instruction Manual

As Presented by
Paul W. Lawrence
plawrence@texaslandandwater.com
(512) 219-0883

Water Inlet Filter
Overflow Port
Spigot/ Hose Bibb Assembly
A) Materials Used

A) 1 Food-Grade Plastic Barrel with Locking Lid
B) 1 3/4" Brass, Male-Threaded Hose Bibb
C) 1 1" Rubber Washer, Flat
D) 1 1" Backing Nut (Brass or PVC)
E) 1 3/4" Male Adapter (PVC) for single-barrel setup
   or 2" Male Adapter for multi-barrel setup
F) 1 3/4" Backing Nut (PVC) for single-barrel setup
   or 2" Backing Nut for multi-barrel setup
G) 1 6" Diameter Plastic Flower Pot
H) 1 7"X7" Square Section of Fine Window Screening
I) 1 Tube of Waterproof Silicone Sealant (Caulking)
J) 1 Flexible Downspout Gutter Extension

B) Tools Required

1) 1 6" Hole Saw
2) 1 1" Hole Saw
3) 1 (Optional) 2 1/4" Hole Saw for multi-barrel setup
4) 1 Variable Speed Power Drill
5) 1 Utility Knife
6) 1 Hacksaw
7) 1 Caulking Gun
8) 1 Adjustable Wrench
9) 1 Pair Scissors
10) 1 Magic Marker
11) 1 Tape Measure/Ruler

Figure No. 1, Materials

Figure No. 2, Tools

Figure No. 3, Assembled Spigot/Hose Bibb

Figure No. 4, Assembled Water Inlet Filter

Figure No. 5, Assembled Overflow Port

Figure No. 6, Assembled Rain Barrel
A) Spigot/Hose Bibb Installation

1) Remove top of food barrel
2) Using the 1” Hole Saw and Electric Drill, bore a hole between 8-10” above the base of the barrel
3) Use the Utility Knife to cut away any plastic burrs that were created by boring the hole
4) Tightly insert the Spigot/Hose Bibb into the hole that you just created, with the valve facing the outside of the barrel
5) Insert the Rubber Washer on the inside of the barrel, onto the threading of the Spigot/Hose Bibb and next to the inside wall
6) Insert and hand tighten the 1” Backing Nut onto the Spigot/Hose Bibb threading inside the barrel
7) Rotate the Spigot/Hose Bibb so that it’s pointing ~45 degrees to the left or right, not straight down
8) Tighten the Backing Nut with the adjustable wrench
9) Apply a bead of Silicone Sealant inside the barrel, around the area where the Backing Nut and Rubber Washer contact the inner barrel wall
10) Apply a bead of Silicone Sealant outside the barrel, around the area where the Spigot/Hose Bibb contacts the outer barrel wall

B) Water Inlet Filter Installation

1) With the lid secured on the barrel, place it under the downspout that you will be collecting water from and ensure that the Spigot/Hose bibb is pointing away from the building.
2) Mark the center of the proposed hole 6-8” from the edge of the barrel lid
3) Using the 6” Hole Saw and Electric Drill, bore a 6” hole into the barrel lid, with the drill’s motor running in reverse (it will keep the bit from grabbing the plastic and should minimize the risk of injury to your wrist)
4) Use the Utility Knife to cut away any plastic burrs that were created by boring the hole
5) Collect the 7”X7” square piece of Fine Window Screening, the Scissors and the 6” Plastic Flower Pot
6) Set the Window Screening on your work surface and place the Flower Pot on top, but make sure that the Flower Pot is upside down so that the widest part of it is in contact with the Window Screening
7) Using the Scissors, cut a circle in the Window Screening that is slightly larger than the widest part of the flower pot (don’t worry about being precise)
8) If the Flower Pot does not already have holes in the bottom of it, bore 4-5 holes with the 1” Hole Saw and Electric Drill
9) Using the Caulking Gun and Silicone Sealant, apply several circular beads on the bottom of the inside of the Flower Pot, especially close to the edge
10) Gather the edges of the Window Screening together, as if you were covering a loaf of bread with plastic wrap
11) Place the Window Screening inside the Flower Pot and release to allow the edges of the Window Screening to spread out inside bottom of the pot
12) Firmly press the Window Screening against the bottom of the Flower Pot onto the beads of silicone sealant (the effectiveness of the screen relies upon complete silicon contact)
13) Place the Water Inlet Filter (Flower Pot/Window Screening combination) into the 6” hole on the top of the barrel
C) Overflow Port Installation

1) Remove the Water Inlet Filter and, with the Tape Measure, measure the distance between the bottom of the Water Inlet Filter and the shoulder that rides on the lid of the barrel

3) Position the barrel as if it’s pointing away from the building; the Spigot/Hose Bibb should be pointing towards you; the overflow will be located on the side of the barrel, roughly ¼ of the way around it, to the left or right (this ensures that the overflow will not be directed onto the Spigot/Hose Bibb or the building)

4) After you’ve decided which side to place the overflow on, use the Tape Measure and mark a point that’s the distance that you measured in step 1, plus 1” down from the top of the barrel

5) Use the *1” Hole Saw and Power Drill to bore a hole on the mark that you just created

6) Use the Utility Knife to cut away any plastic burrs that were created by boring the hole

7) Tightly insert the *¾” PVC Male Adapter into the hole that you just bored, with the threading pointed into the barrel

8) Insert and hand tighten the *3/4” Backing Nut onto the Male Adapter threading inside the barrel

9) Fully tighten the Backing Nut with the Adjustable Wrench

10) Apply a bead of Silicone Sealant inside the barrel, around the area where the Backing Nut contacts the inner barrel wall

11) Apply a bead of Silicone Sealant outside the barrel, around the area where the Male Adapter (Overflow) contacts the outer barrel wall

D) Final Pieces

1) Remove the top of the barrel and wash it inside and out with dish soap; rinse thoroughly

2) Put the lid back on your new rain barrel and ensure that the Water Inlet Filter is in place and that the valve on the Spigot/Hose Bibb is closed

3) Place the water barrel in it’s approximate final location, next to the downspout that you’ll be using and mark the area around the bottom of the barrel

4) You’ll need to construct a level, elevated foundation for the rain barrel that’s 12-20” above the ground - concrete blocks work well for this (a raised foundation is used to develop pressure and to make it easier to fill watering containers)

5) Place the barrel on top of the finished foundation and align it correctly

6) Note the height and horizontal alignment that the base of the downspout needs to be to empty into the water inlet filter from a position that is 1-2” above the center of the top of the filter

7) Cut the downspout with the hacksaw and install the Flexible Downspout Gutter Extension as required to properly line up vertically and horizontally with the water inlet filter

* For a setup utilizing multiple barrels, use a 2 1/4” hole saw, 2” PVC Male Adapter & 2” Backing Nut