Build Your Own Rain Barrel

Tools Required
- Drill with 5/16” bit
- Jig Saw with fine tooth blade
- Utility Knife
- Marker
- Pliers
- Silicone Caulk

Barrel Vendors: There are several local suppliers of recycled food grade plastic barrels and they range in price from $10 to $15. Make sure they have been cleaned and that both bungs are in good condition.
- Bridging the Gap, 816-561-1061 ext. 100
- Habitat Restore, 816-231-6889
- Jerry Lee Medlin; 1273 N 300 Rd., Baldwin City, KS; 785-418-5998
- A-1 Barrel CO; 6035 Kansas Ave, KC, KS; 913-299-3995

Parts List
This parts list contains everything you need to assemble a complete rain barrel. Take this list to your local neighborhood hardwood store and they will help find the parts for your Rain Barrel Kit!

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Teflon Tape</td>
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<tr>
<td>3/4” PVC 90 Degree Street ELL</td>
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<tr>
<td>3/4” PVC Nipple 6” length</td>
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<tr>
<td>3/4” PVC Coupler Thread X Thread</td>
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<tr>
<td>3” PVC adapter Slip x Thread</td>
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<tr>
<td>3/4” Plastic Sink Faucet</td>
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<tr>
<td>Down Spout Adapter</td>
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<tr>
<td>1 Gallon Bucket Grid</td>
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<tr>
<td>Extender Flex a Spout</td>
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<tr>
<td>Flex Drain Hose (length as needed)</td>
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<tr>
<td>Galvanized Gutter Strainer (optional)</td>
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<tr>
<td>Fusion Spray Paint Green (optional)</td>
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<tr>
<td>Recycled Food Grade Barrel 55 gallon</td>
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Calculate how many gallons your barrel will receive during a rainfall event...

\[ G = 0.416 \times R \times A \]

Where: 
- G= Gallons of water
- A= Square feet of roof draining to downspout
- R= Inches of rainfall

Rain Barrel Tips
Keep your barrel free of organic material.
- One tablespoon of olive oil in your water will keep mosquitoes from breeding in the barrel.
- DO NOT use as a potable water source. Children and pets should not be allowed to drink water from the rain barrel.
- In cold weather, take your rain barrel out of operation. When water freezes, it expands, and could crack your barrel or hose.
- Save the piece of gutter you removed and re-install during the winter months.

Q: How much rain does it take to fill a 55 gallon Rain Barrel?
A: It only takes about half an inch of rain if your downspout serves 300 square feet of roof!

What Is a Rain Barrel?
A rain barrel collects and stores rainwater from your rooftop to use later for things like lawn and garden watering. Water collected in a rain barrel would normally flow through your downspout, onto a paved surface, and eventually into a storm drain.

Why Use Rain Barrels?
- Cost-effective alternative to using tap water for watering yards and gardens.
- Better plant growth when watered with rainwater
- Decreased erosion in your downspout area
- Reduces peak volume and velocity of Stormwater runoff to streams and storm sewer systems
- No chemicals and energy spent processing drinking water for your plants
- Rain barrels reduce water pollution by reducing Stormwater runoff which can contain pollutants like sediment, oil, grease, bacteria and nutrients
- Rain barrels are inexpensive and easy to build and install

By using these directions and the parts list in this guide you can build your very own Rain Barrel

Planning: When choosing a location for your barrel, consider which downspout(s) you would like to divert into the barrel, and the proximity to plants needing water. Next, think about where the water that comes out of the overflow hose of the rain barrel will go. It may simply go to a grassy area where the downspout had directed water previously. Or, you may want to direct the overflow hose into a second rain barrel.

Site Preparation: Once you have selected your downspout; cut the gutter off about six feet from the ground. Your barrel needs to be elevated due to the faucet and to increase pressure. To elevate it you can either build a base out of 2x6’s (as shown) or buy some concrete blocks. Whatever you choose make sure its sturdy - a full 55 gallon barrel can weigh over 400 lbs.
**Instructions**

**Step 1:** If you want to paint your Rain Barrel do so first. Krylon Fusion spray paint is ideal for plastic surfaces exposed to the sun. This rain barrel is designed so that the top (with holes) is actually used as the base. Turn your barrel upside down to begin.

**Step 2:** Trace around down spout adaptor on top of the barrel with a marker. The location can be in the center or customized based on your specific needs.

**Step 3:** Drill a 5/16” pilot hole at the edge of the circle. This will be used as a starter hole for your jig saw.

**Step 4:** Cut around your trace line to make a hole for the down spout adaptor.

**Step 5:** Trace around the threaded end of the 3” PVC adaptor.

**Step 6:** Drill 5/16” pilot hole on the inside edge of circle.

**Step 7:** Cut on the inside edge of the trace line to create a hole for the overflow pipe. You will be threading the PVC adaptor directly into the plastic so be careful not to cut the hole too large.

**Step 8:** Apply clear silicone caulk to the shoulder of the PVC adaptor.

**Step 9:** Press the threaded end of the PVC adaptor into the hole firmly. Start threading the PVC adaptor by turning it clockwise until seated firmly.

**Step 10:** This is what the overflow pipe should look like when attached. If you cut your hole too large you can purchase a 3” conduit nut to secure the adaptor from the inside.

**Step 11:** Lay out the pieces of the faucet assembly as shown.

**Step 12:** Wrap Teflon tape around all male threads.

**Step 13:** Assemble the pieces shown by screwing them together hand tight. Do not attach the faucet yet.

**Step 14:** Cut the center out of the course threaded bung with a utility knife.

**Step 15:** This is what the bung looks like the with the center removed. The 90 degree elbow shown will thread into it in step 18.

**Step 16:** Wrap the threads of fine threaded bung with Teflon tape and secure with a pair of pliers turned upside down.

**Step 17:** Wrap the threads of coarse threaded bung with Teflon tape and secure with a pair of pliers turned upside.

**Step 18:** Thread faucet tube into bung with center removed. Screw in hand tight so tube is facing out.

**Step 19:** Turn rain barrel upside on stand or concrete blocks and attach faucet.

**Step 20:** Trace around square part of down spout adaptor and cut plastic strainer to fit. Place strainer inside to keep leaves out.

**Step 21:** Attach down spout adaptor into hole on top of rain barrel. Attach flex-a-spout from downspout to rain barrel.

**Step 22:** Attach flex-drain to overflow and route to grassy area away from your foundation.