**Building a Rain Barrel**

**Introduction:** The first step in Building a Rain Barrel is to have an idea of how you plan on using your Rain Barrel. The first part of these instructions will focus on the building of one Rain Barrel using a 55 gal barrel like the one in Picture 1. This type of barrel comes with two 3/4” thread plugs on the top of the barrel. These threaded plugs make it very easy to screw in the piping for your discharge. This end of the barrel will be the bottom of the Rain Barrel. On the bottom of the barrel there will be a indent that serves as a hand hold. See Picture 2.

**Step 1:** Using a 3/4” inch bit drill out the stop in the plug on the side with the hand hold on the other end. Be careful not to hit the threads. See Picture 3.

**Step 2:** Assemble the Discharge Pipe. Take a 3/4” X 2 1/2” galvanized pipe that is threaded on both ends. Apply Teflon tape to one end of the pipe. Screw the pipe into a 3/4” threaded female 90° elbow. Next take a 3/4” X 4” galvanized pipe. Apply Teflon tape to one end of the pipe. Screw the end into the 90° elbow. Screw the other end of the 4” pipe into one of the ends of the 3/4” threaded PVC Ball Valve. BE SURE to Teflon tape the threads on the pipe. Finally, take the 3/4” brass pipe that has pipe threading on one side and garden hose threading on the other side. Teflon tape the side with pipe threading and screw the end into the Ball Valve. Using a pipe wrench tighten all connections. See Picture 4 to see how to assemble the Discharge Pipe.

**Step 3:** Take your drill with a 4 1/4” circular saw bit and drill a hole on the side opposite side from the hand hold and the hole for the discharge pipe. This hole is where you will place the 4” X 3” PVC coupling that will act like a funnel for the downspout. See Picture 5.

**Step 4:** You will need to cut a hole that will act as the overflow opening for when the barrel gets full. Decide which side you want to drill the hole. My suggestion is to cut a hole about an equal distance between the two other openings using a 2” circular saw bit. BE SURE the hole is cut near the very top of the barrel. See Picture 6. Once the hole is cut, take a 1 1/2” DMV Male Adapter and a 1 1/2” Conduit Lock-out nut, and caulk See Picture 7 on back page.
Add sealing caulk to the adapter at the top of the threads. Place the threaded end of the adapter into the overflow hole (picture 8) from the outside to the inside. Take the Conduit Locknut and screw it onto the threaded end by reaching through the 4 1/2” hole cut early. Screw the locknut on as far as possible. Tighten by holding the nut and turning the adapter as tight as possible. Using a wet rag, wipe off any caulk the has been squeezed out on the outside. You can attach a hose or a pipe to the overflow adapter to direct the flow of the water away from the foundation of the house.

**Step 5:** There must be a receiver placed in the 4 1/4” hole on top to receive the water from the downspout. Take the 4” X 3” PVC Coupling, clamp, and screen mesh and assemble the receiver as shown in Picture 9.

**Step 6:** The Rain Barrel must be placed on an elevated surface to allow easy access to the discharge pipe. After determining the location of the barrel in relation to the downspout place the barrel on either concrete blocks or 6” X 6” treated wood beams. See Picture 10.

**Other Options:**
- You could use a male 3/4” boiler drain as your discharge valve. Use a 3/4” spade bit to drill the hole. Be sure to place hole on the flat surface on the side of the barrel and opposite the drain hole in case you need to attach a conduit nut on the inside. Add caulk to the neck of the threaded side and carefully screw the boiler drain into the hole. The threads on the drain will thread the plastic in the hole. **NOTE:** you will need to cut the rim on the barrel to allow access to the hose connection. **BE CAREFUL** not to cut too deep and put a hole in the barrel.
- You can also connect two rain barrels together several ways to increase your capacity. In Picture 10 note the arrow is pointing to a 1 1/2” adapter that you can use a short piece of PVC pipe to hook to an adapter on another barrel. You could also screw a 3/4” Garden hose adapter LFA 665 into the threaded cap on the bottom on each barrel and use a short hose to connect the barrels.