



how to make a RAIN BARREL

RAIN BARRELS

A rain barrel is a container that collects and stores rainwater from downspouts and rooftops for future use watering lawns and gardens. Generally a rain barrel is made using a 55-gallon drum, a vinyl garden hose, PVC couplings, a screen grate to remove debris and keep insects out, and other materials found at most hardware stores.

Rain barrels can be constructed in a number of ways, but they all serve the same purpose ... to collect rainwater and decrease the amount of stormwater runoff that leaves your property.

The average rainfall of one inch within a 24-hour period can produce more than 700 gallons of water that runs off the roof of a typical house. Even one rain barrel can drastically decrease the amount of water entering the local waterways.

Using rain barrels also helps homeowners lower water bills, while improving the vitality of flowers, trees, and lawns. During the summer months it is estimated that nearly 40 percent of household water is used for lawn and garden maintenance. A rain barrel collects water and stores it for those times that you need it most ... during the dry summer months.

GETTING STARTED

Generally a rain barrel consists of three main components: a barrel, a top hole, an upper overflow drain, and a bottom drain.

Plastic 55-gallon drums are the recommended type of barrel to use for safely collecting water with minimal leaking.

A **top hole** should be cut in the top of the barrel for collecting water. Insert a skimmer basket like those found in garden ponds and swimming pools to filter out leaves and other debris. You can also cover the basket with fiberglass window screen to prevent mosquitoes and other disease-carrying insects from entering the barrel.

The **upper overflow drain** is a hose that allows for the rain barrel to overflow in case the rain barrel gets too full.

The **bottom drain** is a plastic or brass spigot that attaches to a garden hose for watering lawns and gardens. The spigot should be kept in the "closed" position when not in use.



TOOLS

- 1" spade drill bit
- 2-3/8" drill bit
- 1/2" drill bit
- Electric jigsaw
- Electric drill
- Utility knife
- Marker

SUPPLIES

- 1 - 55-gallon plastic barrel
- 3/4" plastic or brass spigot
- 2" diameter PVC Pipe
- 1 - Skimmer basket (round or square)
- 1 - Silicone sealant
- 1 - 3-ft. section of 1-1/4" discharge hose (such as a sump pump discharge hose)
- 1 - Hose clamp
- 2- 3/4" rubber gaskets
- 1 - 12" x 12" piece of fiberglass window screen

WHERE TO BUY A BARREL

Some Kansas City area retailers or organizations sell 55-gallon plastic barrels at a small fee. Some organizations may also sell already assembled barrels.

- **Bridging the Gap:** 816-561-1061 x-100
- **Critical Site Products:** 816-331-9738
- **Habitat for Humanity ReStore:** 816-231-6889
- **Little Blue River Watershed Coalition:** 816-356-4040

INSTRUCTIONS

TOP HOLE & BASKET

1. Use the skimmer basket to trace template on top of barrel.
2. Pre-drill small hole using 1" spade bit.
3. Make sure to drill inside the line.
4. Use a jigsaw to cut out the pattern following the inside line.
5. Cut fiberglass window screen to fit skimmer basket.
6. Affix screen to lip of basket using silicone sealant.
7. Allow sealant to dry per manufacturers instructions.
8. Place skimmer basket over hole on top of the rain barrel.



UPPER OVERFLOW DRAIN

1. Mark an approximate hole at least two inches from the top of the rain barrel.
2. Use a 2-3/8" drill bit to drill a hole where you made the mark.
3. Push the 2" diameter PVC pipe into the hole. Use utility knife as needed to increase the hole size.
4. Use the silicone sealant to seal around the PVC pipe on the inside and outside of the barrel.
5. Allow sealant to dry per manufacturers instructions.



BOTTOM DRAIN

1. Mark an approximate hole at least two inches from the bottom of the rain barrel.
2. Use a 1/2" drill bit to drill a hole where you made the mark.
3. Screw plastic or brass spigot into hole. Use utility knife, as needed, to increase hole size.
4. Remove spigot and place a rubber gasket over threads next to the outside and inside walls of the barrel.
5. Use the silicone sealant to seal around the spigot on the threads.
6. Place spigot back into hole.



ATTACHING HOSES

1. Attach the 3' 1-1/4" diameter discharge hose to the upper overflow drain. You can use a discharge hose such as a sump pump discharge hose.
2. Secure the discharge hose with a hose clamp.
3. Screw your garden hose to the spigot in the bottom drain.



FINAL STEPS

1. Build a base out of cinder blocks, bricks, decorative stones or railroad ties to elevate the rain barrel to create water pressure.
2. Adjust the downspout from the building to flow into the skimmer basket at the top of the rain barrel.
3. Make sure the overflow discharge hose is allowed to drain away from the building.



TIPS:

- **Make sure your barrel is clean and free of chemicals before using.**
- **You may also want to place the rain barrel inside during winter months to avoid formation of damaging ice.**
- **Paint or decorate your rain barrel to make it a distinct part of your yard or garden.**