

Power Guide: DIY Rainwater Harvesting System

What You'll Learn:

- How to collect and store rainwater safely
- How to build a basic barrel system using easy-to-find parts
- How to use your system for watering gardens, flushing toilets, or emergency use

Materials List:

- 1 Food-grade 55-gallon drum (plastic or metal)
- Mesh screen or window screen (for filtering debris)
- Rain diverter or flexible downspout elbow
- Spigot kit or bulkhead fitting
- Silicone sealant
- Overflow hose or flexible tubing
- Bricks or blocks to raise the barrel off the ground
- Optional: first flush diverter kit (if advanced use)

Tools Needed:

- Power drill with hole saw bit
- Wrench or pliers
- Tape measure
- Marker or pencil
- Utility knife

Step-by-Step Instructions:

Step 1 ' Choose Your Barrel Spot:

Place it near a downspout and on level ground. Use bricks or blocks to raise it about 12'18 inches.

Step 2 ' Prep Your Barrel:

Drill a hole near the bottom for your spigot. Insert the bulkhead fitting or spigot kit and seal with silicone.

Step 3 ' Add Your Top Screen:

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Cut a hole in the top and cover it with mesh screen. This keeps out leaves and mosquitoes.

Step 4 ' Modify Your Downspout:

Use a rain diverter or cut your downspout just above the barrel. Use an elbow or flexible tubing to direct water.

Step 5 ' Install Overflow Drain:

Drill a hole near the top side of the barrel and attach overflow tubing. Direct it away from the foundation.

Pro Tips:

- Use dark barrels to prevent algae growth
- Place barrels under multiple downspouts
- Connect multiple barrels for extended storage

Safety Notes:

- Do not drink the water unless purified
- Clean your barrel every 2'3 months
- Ensure ground under the barrel stays dry

Download Info:

This guide is part of the Power Shed Off-Grid Series.

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