

How to Build and Install a Rain Barrel

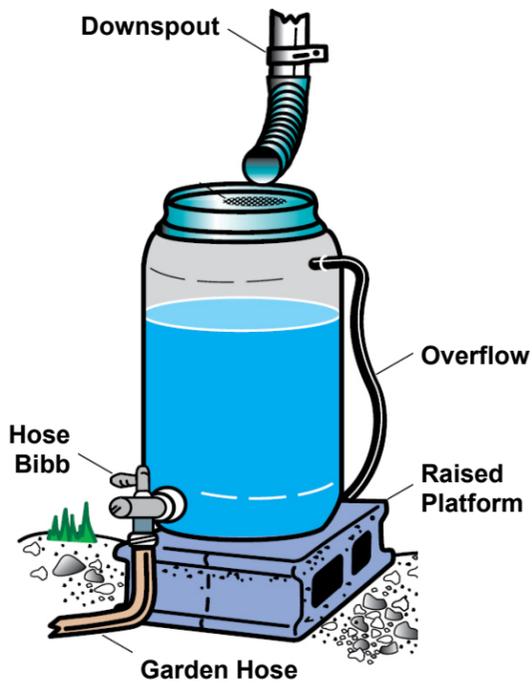


Image: Philadelphia Homeowner BMP Manual

Step 1:

Using a jigsaw or 4 1/2" hole saw, cut hole in top of barrel to fit downspout adapter. An alternative method is to remove the entire top of barrel and place screen over the top secured with a bungee cord.



Jigsaw

Hole Saw

Screen with bungee cord

Supplies:

- ◆ Large (55 gal) Barrel
- ◆ 3/4" Brass Hose Bibb
- ◆ 3/4" Tank Fitting (for hose bibb)
- ◆ 1 1/4" Tank Fitting (for overflow)
- ◆ Reducer (to fit overflow hose)
- ◆ Overflow Hose
- ◆ Downspout Adapter (2"X3" or 3"X4")
- ◆ Filter Basket
- ◆ Teflon Tape
- ◆ Drill
- ◆ Jigsaw or Hole Saw
- ◆ Piece of Hose or String at least 4' long
- ◆ Channel Lock Pliers
- ◆ Tape Measure

Step 2 - Hose Bibb:

Using a jigsaw or 1 3/4" hole saw, cut a hole centered 2 1/2" off bottom of barrel. Using a piece of hose or string, guide 3/4" tank fitting through top hole and out bottom hole. Secure with nut (left handed thread). Wrap threads of brass hose bibb with Teflon tape and screw into tank fitting. Garden hose can now be attached to hose bibb.



2 1/2"

3/4" Tank Fitting

Hose Bibb

Step 3 - Overflow:

Using a jigsaw or 2 1/2" hole saw, cut center of hole 4" from top of barrel. Place 1 3/4" tank fitting in hole and secure. Screw reducer into fitting. Attach overflow hose.



4"

1 1/4" Tank Fitting

Reducer

Step 4 - Downspout Connection:

Place strainer basket and downspout adapter in hole. Downspout can be cut to exact height to fit in adapter or a flexible downspout section can be used to make the connection.



Special thanks to our hand model, John Vannicola.

Local Suppliers:

Cottin's Hardware
1832 Massachusetts St
843-2981

Earl May Nursery &
Garden Center
3200 Iowa St
749-5082

Orscheln Farm & Home
1541 E 23rd St
842-4728

Tractor Supply, Co.
2450 Fairfield St
331-2395

Westlake Ace Hardware
601 Kasold 865-2622
711 W 23rd 843-8484

 **City of Lawrence**
PUBLIC WORKS

Stormwater Division
785-832-3136

www.lawrenceks.org/public_works/stormwater

Local Parts Suppliers:

Cottin's Hardware
1832 Massachusetts St
843-2981
Hose bibb, downspout adaptor

Jerry
59 & 56 Hwy Junction
785-418-4430
Barrels, Cash Only

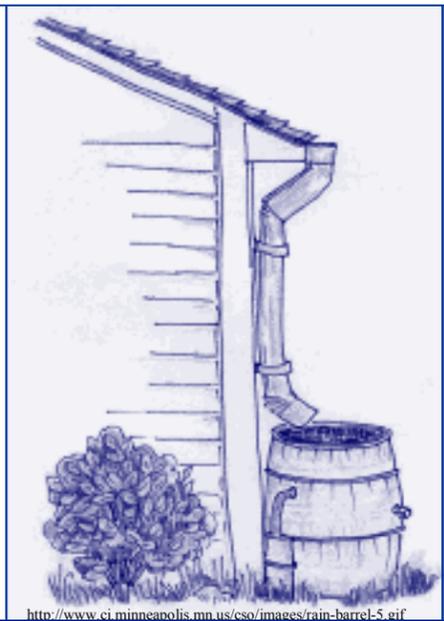
Water's Edge
847 Indiana
841-6777
Filter Basket & Tank Fittings

Westheffer Co.
921 N 1st
843-1633



What is a Rain Barrel?

A rain barrel collects and stores rainwater from your rooftop for use in your yard or garden. Water collected in a rain barrel would normally flow through your downspout, onto a paved surface and eventually into a storm drain.



<http://www.ci.minneapolis.mn.us/cso/images/rain-barrel-5.gif>

Benefits and Uses:

You can use water from your rain barrel to:

- Fill Birdbaths
- Water Garden or Container Plants
- Water Indoor Plants
- Clean Garden Tools

Rainwater is naturally soft and contains no minerals and chemicals. When used for watering plants, rainwater will leave no calcium carbonate residue.

Rain barrels help lower water costs. It is estimated that 40% of water used during summer is for lawn and garden maintenance.

Rain barrels reduce stormwater runoff resulting in:

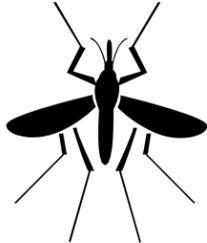
- Fewer pollutants in our stormwater.
- Less potential for localized flooding.

1" of rainfall produces .6 gallon of water per square foot. This results in 600-700 gallons of water flowing from the average house during a 1" rain storm.

Rain barrels are inexpensive and easy to build and install.

Warning!

Though excellent for watering ornamental plants, rain barrel water should not be used as a potable water source. Do not use for drinking, washing or cooking.



To prevent mosquitoes from breeding in your rain barrel, keep connections tight and screens or other covers in place. Mosquito dunks can be used or 1 tablespoon of vegetable oil can be placed in the rain barrel to form a film on the top of the water.

How can I increase the water pressure?

Water pressure is directly related to the level of water in the barrel. The higher the water level, the greater the pressure. Elevating the barrel can also increase the pressure. Just be sure the barrel is placed on a stable, level surface.

Will my rain barrel tip over?

Water weighs a little over 8 lbs. per gallon, so a 50-gallon rain barrel will weigh over 400 pounds when full. If you have small children or pets, and are concerned that the barrel might tip over, you may want to strap or attach the barrel to a nearby wall or other stable structure (fence, tree, etc.). Any type of frame can be built around the barrel.

More Storage:

Multiple barrels can be linked to provide more storage. Connect the overflow from the first barrel to subsequent barrels. Connecting multiple barrels using 2" PVC pipe will handle even large storms. Each barrel will need a hose bibb near the bottom to allow each barrel to be completely emptied.



Painting Your Barrel:

Krylon Fusion is recommended for painting plastic, including rain barrels.

1 can will cover a barrel, but 2 cans will ensure good coverage and allow left over for touch-ups.

Before painting, sand the barrel with fine grit (220 or higher) sand paper. Then clean the surface with an ammonia base cleaner.

Your rain barrel can be painted to match your house or get creative...



Rain Barrel Maintenance:

If your rain barrel is properly installed, it should require little maintenance. Periodically remove debris from the filter or screen, check the overflow hose for clogs and inspect the tank for cracks or buildup of debris in the bottom. Some barrels, especially light-colored or clear ones that are in direct sunlight, may become brittle over time. Painting them will make them last longer.

In cold weather, take your rain barrel out of operation. Store upside down so it will fully drain and remain relatively clean. Water remaining in the barrel or hose may freeze and crack the barrel or hose. Downspouts may be reattached to divert winter precipitation.

Accessories:

Downspout Filter



Downspout Diverter



Soaker Hose



Rain Chain

