



ARLINGTON ECHO RAIN BARRELS

Installation and User Instructions



Arlington Echo Outdoor Education Center
Anne Arundel County Public Schools
975 Indian Landing Road
Millersville, MD 21108
410-222-3825

www.arlingtonecho.org (can order online for \$80)

For 10 or more rainbarrels at \$60, contact WSA 410-222-3831 www.aawsa.org.

Single Rain Barrel Construction and Parts:

recycled food grade 50-55 gallon barrel

- 1) **white flexible downspout adapter** to direct water from downspout to rain barrel
- 2) **netted basket** to prevent mosquitoes
- 3) **outflow hose with control valve and hose connection** for slow drainage and ease of connecting hose or soaker hose
- 4) **overflow hose** to direct water away from building or reconnect with drainage system
- 5) **(optional) brass spigot** attached at watering can height



Tools and supplies needed:

marking pen

hacksaw

self tapping sheet metal screws to secure flex downspout

level

shovel

Optional: pea gravel, rocks or sand for leveling

Downspout straps, platform materials

Installation Instructions

1. CHOOSE LOCATION AND PREPARE SITE.

Site must be leveled to accommodate a 24-inch diameter rain barrel. Prepare the area under the downspout by removing any existing splash block. Level the ground, adding sand, crushed stone, or pea gravel as a base if necessary. Landscape timbers can provide a frame for the leveling materials.



Placing concrete blocks, bricks, or pressure-treated lumber under the barrel provides stability and can produce additional water pressure. A platform 2 feet high will provide pressure to empty the barrel through an attached soaker hose. Each 1 foot of elevation provides $\frac{1}{2}$ pounds per square inch (psi) of pressure.



Concrete block can be used as platform



Bricks can also be used as platform

2. MARK YOUR DOWNSPOUT.

Bend your flexible downspout adapter into an “S” shape. Place your barrel in front of downspout where you would like it to be installed. Hold the bottom of the adapter against the netted basket and the other end against the downspout.

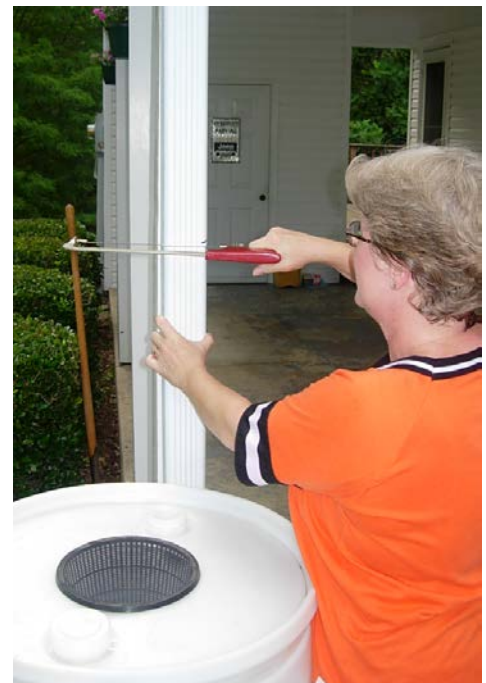


Mark the downspout where it fits into the bottom of the adapter fitting. Most residential downspouts are 3"x 5". If you have larger 4" x 6" downspouts, use the other (larger) end of the adapter. Be sure not to cut the downspout too short!



3. CUT YOUR DOWNSPOUT.

Use a hacksaw to cut the downspout off at your mark. Hold the lower section for stability. You may want to position a thin piece of scrap wood between the downspout and the siding of your house to protect it from the saw.



4. CONNECT YOUR BARREL.

Insert the shortened downspout into the flexible adapter. Screw the plastic flexible adapter to the downspout using metal screws. Reattach downspout strap to house siding using straps if necessary for stability. Rest the lower end of the flexible adapter on the screen of the netted basket with enough pressure to hold basket in place. Make sure your barrel is level and stable. A full rain barrel can weigh over 450 lbs and should be properly supported.



Reattach downspout straps



5. CONNECT AND DIRECT HOSES AND SOAKER HOSES AND OVERFLOW AWAY FROM BUILDING FOUNDATION.

Connect an uncovered soaker hose if desired. Additional 1/8 inch holes should be drilled in soaker hose approximately every 1 foot to enable quicker emptying of rain barrel water. Overflow needs to be secured to be directed away from building foundation.

Painting Rain Barrels

White rain barrels can be painted to match your house, to camouflage behind shrubs, or to have artistic accents. Painting rain barrels makes them opaque, which reduces algae growth. To prepare for painting, lightly sand or rub with rubbing alcohol. Plastic furniture paint or exterior paint/stain works very well. Some successful brands are Rustoleum Plastik, Krylon Fusion, or Cabot exterior stain. 2 to 4 spray cans per barrel are normally required for full stain coverage. For decorative painting, primer(like Kilz), acrylic or exterior paint, and a sealer are recommended. Min Wax Waterbases PolyAcrylic Spray or liquid produce good results. Painted rainbarrels can chip easily, so be prepared for touch up work.



Precautions

- 1) Rain barrel water is non potable. Do not cook or drink with it, but spread it out to water plants, wash your car or use for other purposes.
- 2) Ensure hose valve and overflow are directed away from building foundations.
- 3) Do not store water in winter as it can freeze and cause plastic barrel to crack or burst. Open lower drain valve in winter to allow water to pass through barrel until risk of freezing is over. Remove hoses or soaker hoses.

Maintenance



MONTHLY

Move flexible adapter away and remove and clean netted basket. Ensure that the overflow hose is intact and is directed away from building foundation. Ensure all connections are tight.

ANNUALLY

Flush rain barrel with water and/or vinegar to remove any accumulated algae. Before first freeze, detach and store hoses, leaving bottom drain valve open. Once detached from hoses, route the drain water away from base of barrel and foundation using a splash block or other method.