



Rain Barrel Installation



Rain barrels

Rain barrels collect and store rain water from your roof top to use later for watering your garden or lawn. Rain barrels can save you money and help keep your garden green during the summer when water is in short supply.

Rain barrels can be made from a variety of materials including: wood (recycled oak whisky barrels), heavy plastic (recycled watertight food grade barrels) or new garbage cans. Many commercially made rain barrels are molded heavy duty plastics. The wide array of choices allows for creativity when fitting barrels into garden landscapes and buildings' architecture.

Safety Considerations

- Rain barrel(s) must be secured on a firm and level surface. A full 55-gallon rain barrel weighs over 400 lbs. and tipping is a risk. The barrel should be structurally sound and be a food-grade container made to hold liquid. Containers such as trash cans are not designed to withstand the pressure of the water.
- The barrel must have a lid that can be secured to prevent children and animals from falling in and have a sturdy fine mesh over all openings to prevent mosquitoes and debris from getting inside.
- The water from the rain barrel should never be used for drinking, cooking or other potable uses.
- The rain barrel must have an overflow to a safe discharge point away from the foundation of any structures and must not flow onto adjacent properties.

Sizing

The size of rain barrel you choose depends on how much water you want to store and the size of your roof. Common sizes for residential use are 50 gallons to 90 gallons.

Rain barrels can fill up very quickly. In order to determine the size and/or number of rain barrels that are needed, you need to know the size of your roof or the portion of roof that will drain to the rain barrel. The chart to the right gives you the amount of rain water generated in a one inch storm.

If you have several downspouts estimate the area covered by each downspout. For example: a typical house has a roof area of 1,200 square feet and four downspouts that will each drain about 300 square feet of roof. This means that 0.3 inches of rainfall will fill a 55-gallon rain barrel placed under each downspout.

Size of roof in square feet	Gallons of Rain water generated (1" storm)
900	561
1000	623
1200	748
1400	873
1500	935
1600	997
1800	1122
2000	1247
2200	1371
2400	1496
2600	1621
2800	1745

Placement

- Locate rain barrels under downspouts where rainwater can be easily collected for garden or lawn.
- You can set smaller rain barrels on concrete blocks or pavers to raise the barrel off the ground, which increases water pressure coming out of the hose. (Make sure the barrel is level and secured.)
- Downspouts should be cut or flexible downspout hose can be attached, allowing a three-inch gap between the top of the barrel and the end of the downspout; this provides space for removing the lid to clean the inside of the barrel.

Overflow

As stated above, rain barrels fill very quickly in a storm. The overflow must be directed away from building foundations and cannot run onto adjacent properties. Connect a hose to the barrel's overflow port and direct the water at least 6 feet away from the building foundation. Check the hose periodically to be sure it is positioned correctly.

Most rain barrels can be linked together to increase water capacity or you can buy a larger tank or cistern. (Be sure that all barrels are level and secured.) A diverter valve that redirects the water to your existing downspout system when the barrel is full can also be installed in the downspout. (Different types of diverter valves can be found on the internet.)



Maintenance

Rain barrels operate pretty much trouble free. However, periodic checks throughout the season will ensure success – hoses can be inadvertently moved out of place during regular yard maintenance, loosening attachments. Check that lids and hoses are properly placed and attached, that hardware is functioning properly, that no yard pests have found an entrance into the barrels, and that water is being dispersed in expected locations.

Be sure to keep the screen and lid on the barrel during the warm months of the year to avoid mosquito breeding. Also check the rain barrel for any debris that may have accumulated in the barrel.

Where to Purchase

Rain barrels can be purchased locally or there are dozens of sites on the internet that sell a wide variety of shapes, sizes, and colors of rain barrels.

