

**Rain Barrel Installation Instructions
for the
Philadelphia Water Department's Rain Barrel Implementation Project**

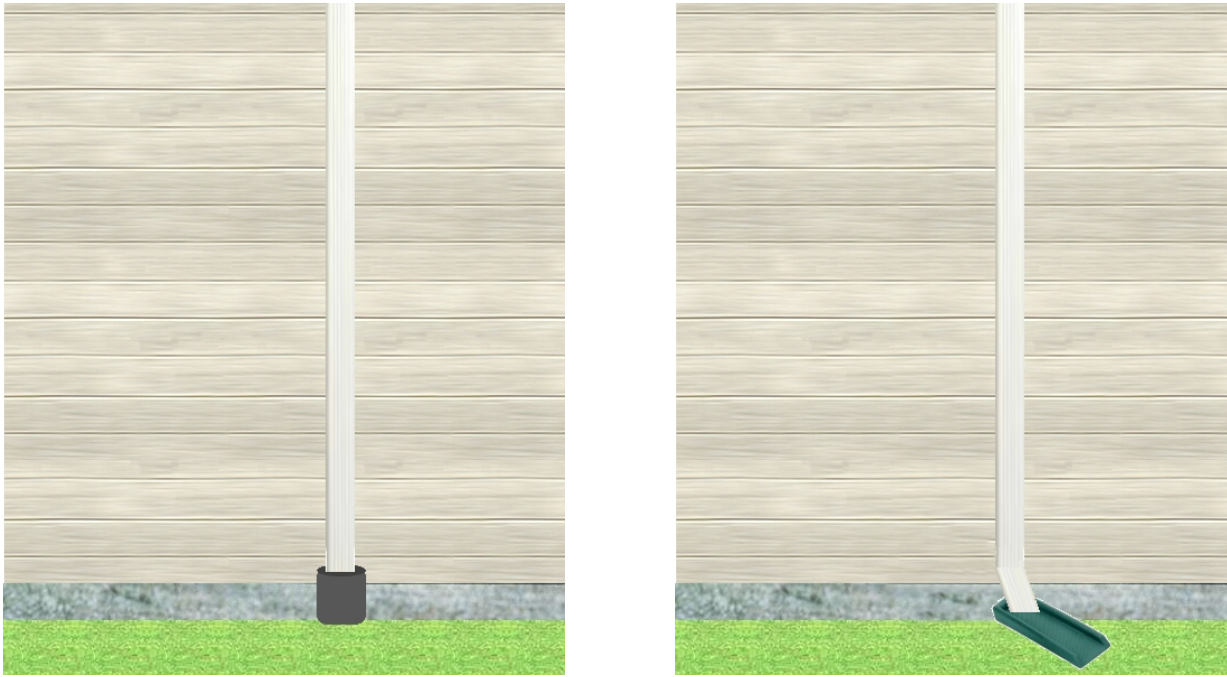
Rain Barrel Diagram



Existing Conditions

Your downspout is the pipe that carries rain water from your roof gutter down to a sewer riser drain or to the ground. Depending on where you live, your downspout may either be connected to the sewer system through a drain or your downspout may direct rain water to your yard or driveway, usually using a splash pad to disperse the flow at the bottom of the downspout.

Philadelphia plumbing code states “Outside leaders and downspouts shall be connected to the house drain which shall be cast iron pipe extending vertically at least 18 inches above the grade level with tight connection between leader and soil pipe.” This means that if you live in Philadelphia, your existing downspout will most likely be connected to the sewer system. If you live in a neighboring community, you will have to check your municipal plumbing code for local regulations.



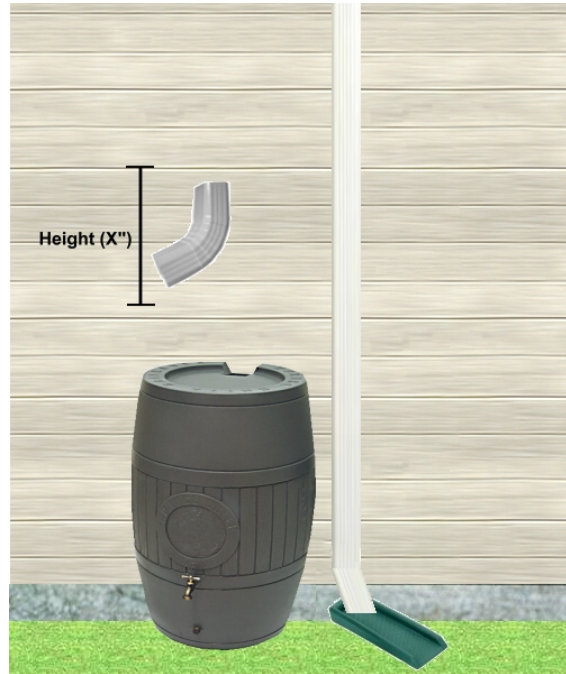
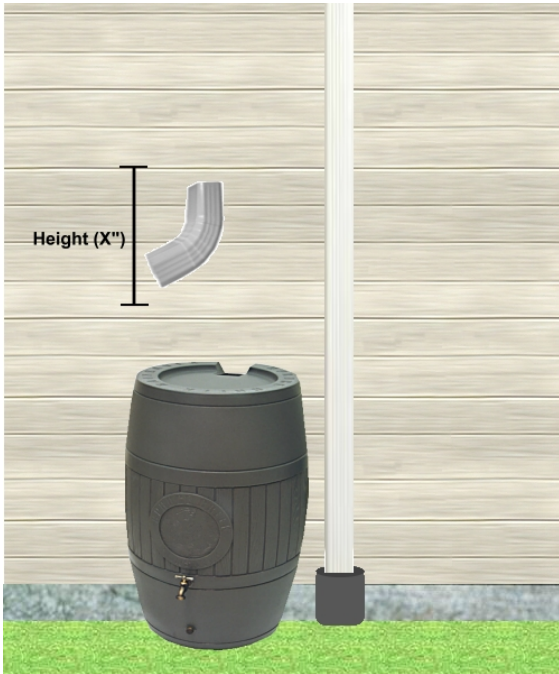
Step 1

Place the rain barrel in the desired location. The barrel should be directly under or near a downspout. Make sure it is level; a level surface will keep any water from ponding on top of the barrel. Measure the total height of barrel (36" for the Spruce Creek Rainsaver) plus any stand it sits on, from the ground to the top of the barrel. Placing the barrel on a platform will give the water more pressure when using a hose.



Step 2

Measure the height of any diverter being used. If the barrel is placed directly under the downspout, a diverter is optional. If your barrel is placed off to the side of the downspout, it may be necessary to use a diverter, such as the ones shown below, in order to direct the water from the downspout into the barrel.

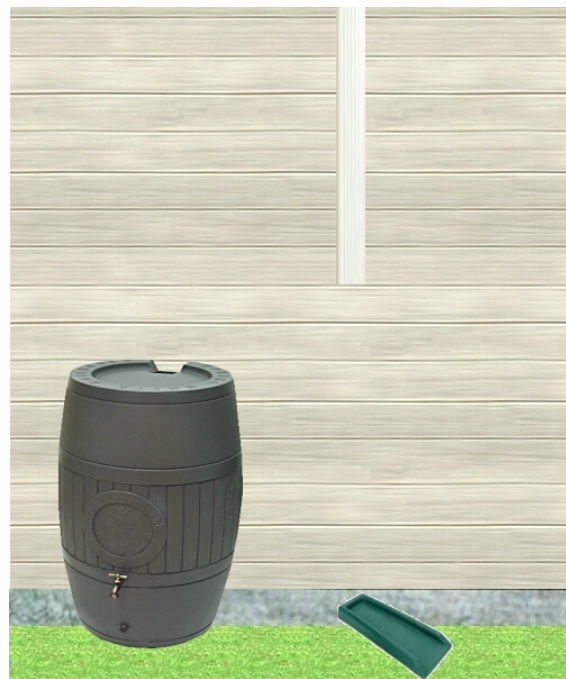
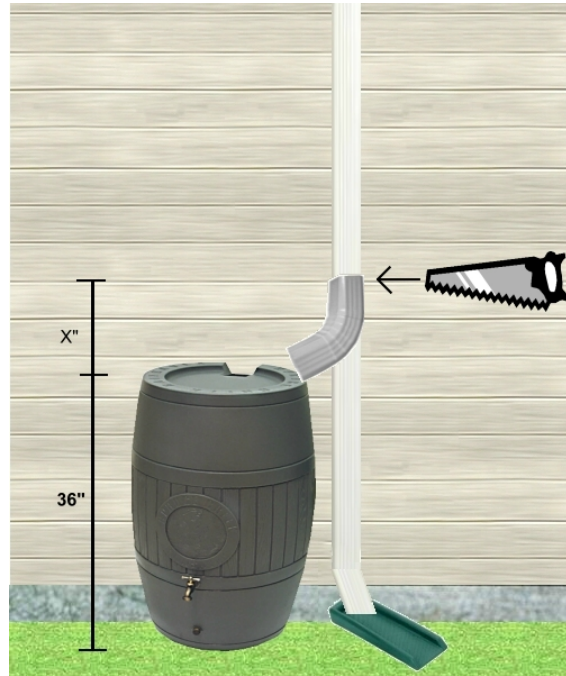
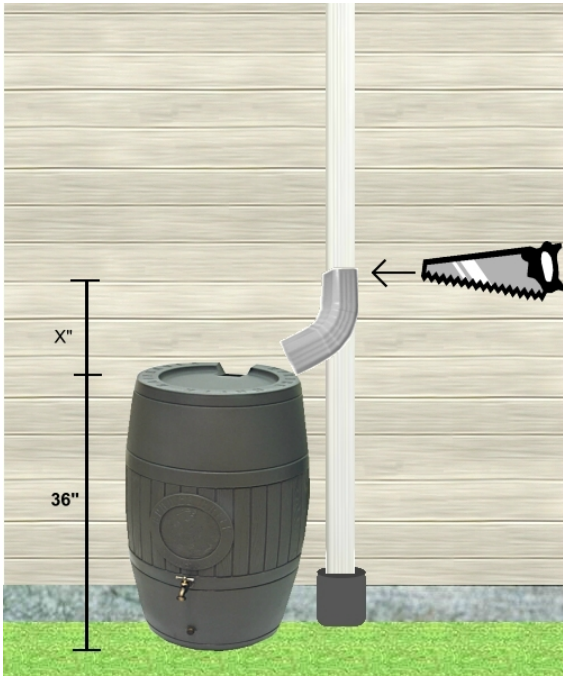


Examples of Diverters



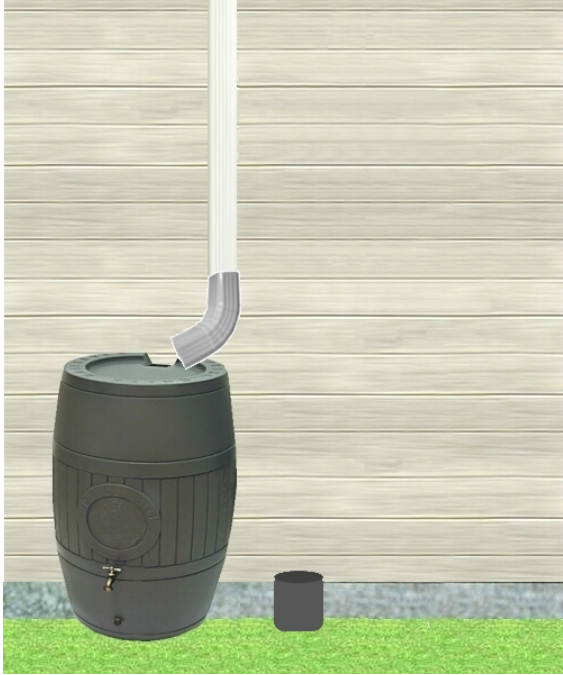
Step 3

Add all of the measured heights together. This will be the height at which you cut your downspout. Cut your downspout using a hacksaw or similar saw and be sure to save the downspout piece that you've cut off. This extra downspout piece can be reattached in the winter when you take the barrel out of use.



Step 4

Attach any diverters being used to the downspout by sleeving it over current downspout and using your hand to crimp them together. Sheet screws can be used to secure it in place. The downspout or diverter should be aimed directly at the screened opening on top of the barrel.



Step 5

An overflow hose is already connected to the back of the barrel. The unattached end of this hose should be directed to where your downspout originally drained – either to a splash pad or the sewer riser drain.



Step 6

You are now ready to use your rain barrel. When it rains, the rain water hitting your roof will collect in your barrel. In order to have the greatest benefit, the barrel will need to be emptied after each storm. This will ensure that the barrel will have capacity available to retain rain water in the next storm.

Some examples of uses for this collected rainwater are:

- Watering lawn
- Watering garden
- Washing car
- Clean outdoor/patio furniture
- Washing gardening containers and tools
- Watering indoor plants and potted deck plants
- Simply release the water before a storm

Please do not use this water as a drinking water source.

If you do not have a use for the water in your barrel, a simple option is to always leave the spigot in a slightly open position so that the water drains slowly from the barrel over several days after a storm.

Also, due to the potentially hazardous chemicals and metals associated with the following materials, it is suggested that you do not use a rain barrel if:

- Your roof is made of wood shingles or shakes and has been treated with chemicals to resist rotting and moss growth
- You have zinc anti-moss strips on your roof
- You have a copper roof or copper gutters
- You have asphalt shingles with zinc embedded in the surface

More information on this can be found at:

<http://home.comcast.net/~leavesdance/rainbarrels/safety.html>

Step 7 - Maintenance

Ponded water can become a breeding ground for mosquitoes. Throughout the year, you will want to make sure the rain barrel stays level so that water cannot pond. You will also want to make sure that the downspout is aimed at the screened opening on top of the barrel. It is important to keep both the fine mesh screen and the larger metal screen in place. The fine mesh screen will keep mosquitoes from breeding in the barrel and the larger metal screen will keep debris from entering the barrel. The screens should be kept clear of debris so the water is free to enter the barrel.

You will want to remove the rain barrel from under the downspout before it freezes in the winter. It is recommended that the barrel be emptied and turned upside down outside or stored indoors for the winter months. If the barrel freezes when full of water, the ice will expand and possibly crack the barrel. When you remove the barrel for the season, you can temporarily reattach the extra piece of downspout that you saved when installing the rain barrel. This downspout section should be sleeved over the existing downspout, crimped, and secured with sheet screws.



Examples of Barrel Installation

