



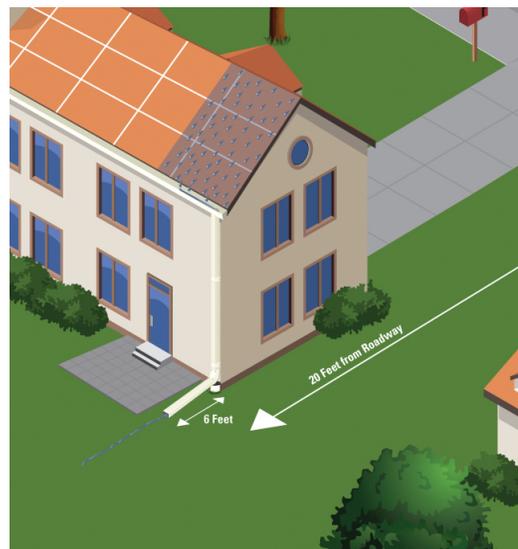
What is downspout disconnection, and why should you do it?

Downspouts are the vertical pipes on your home that collect and channel rainwater and snow melt from your roof and gutters. In many areas, these downspouts are piped into the ground and connected to a sewer system. Excess storm water can overwhelm the sewer system and cause problems like overflows of sewage, flooding, erosion of creek banks and water pollution. Disconnecting your downspout from the sewer system directs that water to your yard or landscaping where it can seep into the ground and help prevent some of the problems caused by excess water entering the sewer system. Downspout disconnection is a simple, quick and relatively inexpensive project involving the removal of the portion of your home's downspout that enters the ground and adding an extension piece that allows you to control where the runoff is discharged on your property.

Will downspout disconnection work on your property?

To avoid undesired flooding when disconnecting your downspout, it is important to ensure your downspout will be directed to an area of your yard that can handle excess water. SD1 highly recommends installing a rain barrel or a rain garden to collect the excess water from your disconnected downspout. However, if you decide to simply direct the flow from your downspout onto your lawn or other vegetated area of your yard, keep the following guidelines in mind:

- **Always consult city and county ordinances first to ensure your downspout disconnection method will meet local requirements.**
- The excess water from your downspout should be discharged at least six feet from your home's foundation, five feet from a public sidewalk and 20 feet from a roadway. **The water discharged from your downspout should not affect your neighbor's property.**
- Make sure the area of yard or landscaping to which you plan to discharge the water from your disconnected downspout is approximately 10 percent of the roof area that drains to the downspout.
 - Determine how many square feet of rooftop you have on your house by multiplying the length of your home by the width.
 - Divide the square feet of rooftop by the number of downspouts on your home to get the area of rooftop that drains to each downspout.
 - Multiply that number by 0.10 to get the area of yard or landscaping you will need.





Sample calculation for determining the area of yard or landscaping you need to disconnect your downspout:

50 ft. (length of home) x 30 ft. (width of home) = 1,500 sq. ft. of rooftop
1,500 sq. ft. of rooftop ÷ 4 downspouts = 375 sq. ft. draining to each downspout
375 sq. ft. x .10 = 37.5 sq. ft. of yard or landscaping needed

- Make sure the ground to which you are redirecting the water slopes away from your house. Water must flow away from your foundation to prevent your basement from flooding. However, if the incline is steep, downspout disconnection is not recommended.
- Place a splash block or rocks beneath your downspout to help spread the flow of storm water and prevent yard erosion.
- Do not discharge the water from your downspout to an area of your yard where a septic system or utility line lies. Call Kentucky811, the "Call Before You Dig Call Center," at 1-800-752-6007 to have a locator mark the location of any underground pipes, lines or cables on your property.



How do I disconnect my downspout?

Notice: Before getting started, always check city and county ordinances to ensure your plans meet local requirements.

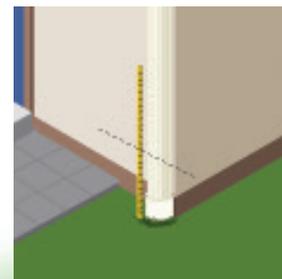
Tools and Materials Needed:

- Tape measure
- Hacksaw
- Metal file
- Pliers
- Drill
- Screwdriver
- Protective equipment (eye, hand, foot)
- Standpipe expansion plug with a hose clamp OR a cap with a wing nut (measure the diameter of the standpipe to correctly size the plug or cap)
- Downspout elbow or flexible hose
- Downspout extension piece
- Sheet metal screws
- Brackets to secure the downspout to your house (optional)
- Splash block and/or rocks (optional)

Step One – Measure and mark the section of your downspout you plan to remove.

Measure out the length of your elbow or flexible hose, and mark the spot on your downspout. Measure up from the standpipe where the downspout enters the ground to ensure your elbow or flexible hose will fit. Your cut will usually be between eight and nine inches above the ground.

Note: If you plan to install a rain barrel to collect the excess storm water from your downspout, be sure to measure and cut your downspout so that your rain barrel and any connector pieces will fit.



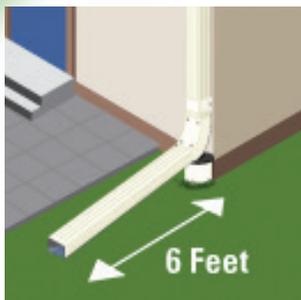
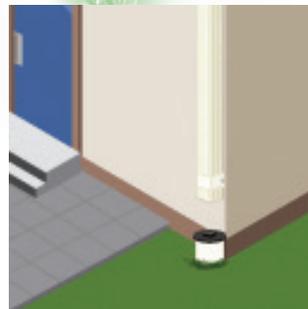


Step Two – Cut the downspout, and remove the cut piece.

With your hacksaw, cut your downspout at the point you have measured and marked, and remove the cut piece. Use a metal file to smooth the rough edges of the downspout.

Step Three – Cap or plug the sewer standpipe.

Use a cap with a hose clamp or a plug with a wing nut to close off the sewer standpipe, which is the open pipe where your downspout entered the ground. Measure the diameter of the standpipe to find the appropriate size plug or cap. Do not cover the pipe with concrete or loosely-fitted objects.

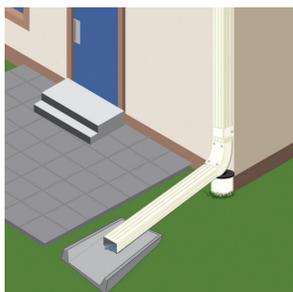


Step Four – Attach the elbow or flexible hose over the downspout.

Cover your cut downspout pipe securely with an elbow or flexible hose. Use pliers to crimp the ends of the downspout so that it slides inside the elbow or flexible hose, and ensure the fit is tight to prevent leaks. Ensure your downspout extension piece is long enough so that water is discharged at least six feet from your home's foundation.

Step Five – Secure the connections.

Drill holes on both sides of the downspout, elbow and extension piece or flexible hose where they connect to each other. Use sheet metal screws to secure them together. You may also need to secure your downspout to your house using brackets to keep it from moving too much.



Step Six – Add a splash block or a rain barrel (optional).

If you are discharging the excess storm water to your yard, place a splash block or rocks beneath your downspout to slow the flow of water and prevent your yard from eroding. Conversely, you can direct the flow of storm water from your downspout into a rain barrel. See the Rain Barrel Installation Guide for information on collecting the water from your downspout in a rain barrel.

Step Seven – Observe your property after a rain event.

Check to see if the area to which you are directing the flow can handle the excess storm water and that the water is not pooling on your property. If the water is not soaking into the ground, try changing the direction of the flow. Remember to ensure the flow is discharging at least six feet from your home's foundation, five feet from a public sidewalk and 20 feet from a roadway. Make sure flow is not affecting your neighbor's property.

