

# DOWNSPOUT DISCONNECTION

## ? DEFINITION

It is the process of separating a roof gutter from the stormwater system. The gutter's downspout gets redirected to disperse rainwater across a permeable surface, such as a garden or a lawn, preventing excess water from entering the street and down the storm drain.

The intent of disconnection is to separate rainwater from the municipal stormwater system. The flow of rainwater from a roof is redirected to a rain barrel, infiltration method, or a permeable surface such as a lawn, rain garden, bioswale, or conservation landscape that can filter and slowly absorb the rainwater into the ground.



**BEFORE**



DIRECTED ONTO DRIVEWAY

**AFTER**



DIRECTED TO LAWN



DIRECTED TO STORMDRAIN

**EXAMPLES**

SPLASH BLOCK



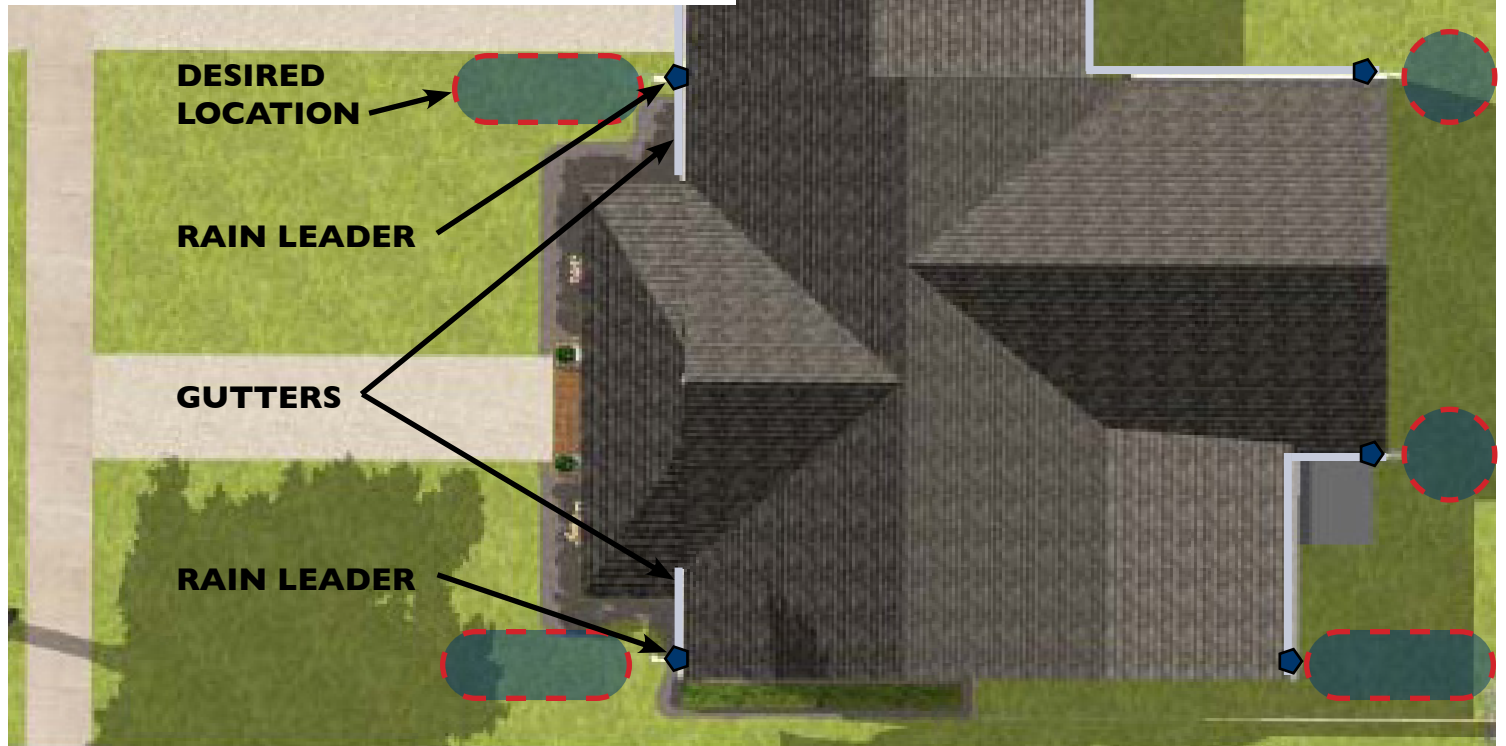
DOWNSPOUT EXTENSION





# CONSIDERATIONS

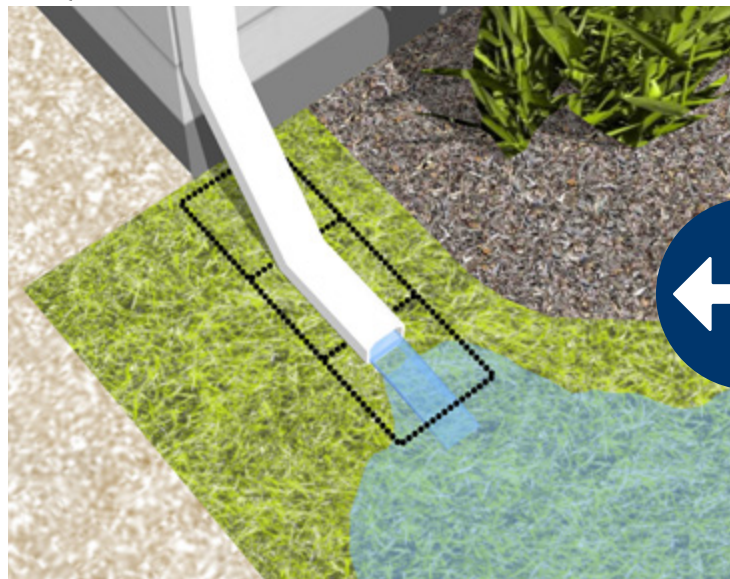
If you don't have gutters this does not apply to you. If you do have gutters and the downspout discharges water onto a hard surface or into a pipe, consider this home project. Account for obstacles and ground slope to determine the desired direction to redirect the water coming out onto a surface such as lawn, rain gardens or planted areas that will absorb the runoff.



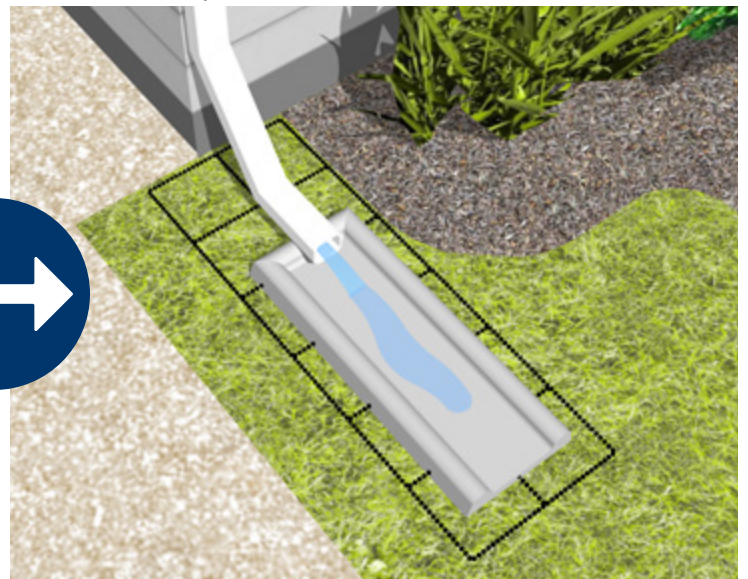
## SIZE

The size of space needed for a downspout disconnection can be as little as three square feet to install.

**3 SQUARE FEET**



**12 SQUARE FEET**



# GETTING STARTED

Disconnecting gutter downspouts is the least expensive of the proposed projects. To evaluate which project works best for you, examine associated costs and materials. Below are suggested items to help you get started.



## DO IT YOURSELF (DIY)

If you intend to perform this work yourself, see the lists for general tools and materials you may need to help you get started.



### Tools & Materials:

- Personal Protective Equipment (PPE)
- Hacksaw
- Drill
- Pliers
- Screwdriver
- Tape measure
- Shovel (optional)
- Gutters (If you don't already have them for the portion of roof where you want to collect rainwater)

- Metal screws or adhesive
- Standpipe cap
- Downspout elbow
- Downspout extension
- Splash block
- Splash box: 2 x 6 Pressure treated wood 12 linear feet total, 4"- 6" sized stone - 2 bags (50 lbs each), &
- #57 stone (3/4" size), 1 bag 50 lbs



## HIRE OUT THE WORK

You can also find a local handyman or contractor to do the work for you. Prices will vary on complexity and time needed to complete the job.



## KIT or SPECIALTY ITEM

You can purchase a downspout disconnection kit from home improvement stores and Online. Wherever you purchase it, check your kit to ensure all parts needed are included.



# MAINTENANCE

## Seasonal

- Check on gutters and downspouts, especially during times of heavy rain and snow: overflows, leaks, and large icicles are all signals of a need for maintenance.

- Remove leaves and other debris from the gutters.
- Keep downspouts from clogging to keep water away from your home.





# HOW TO

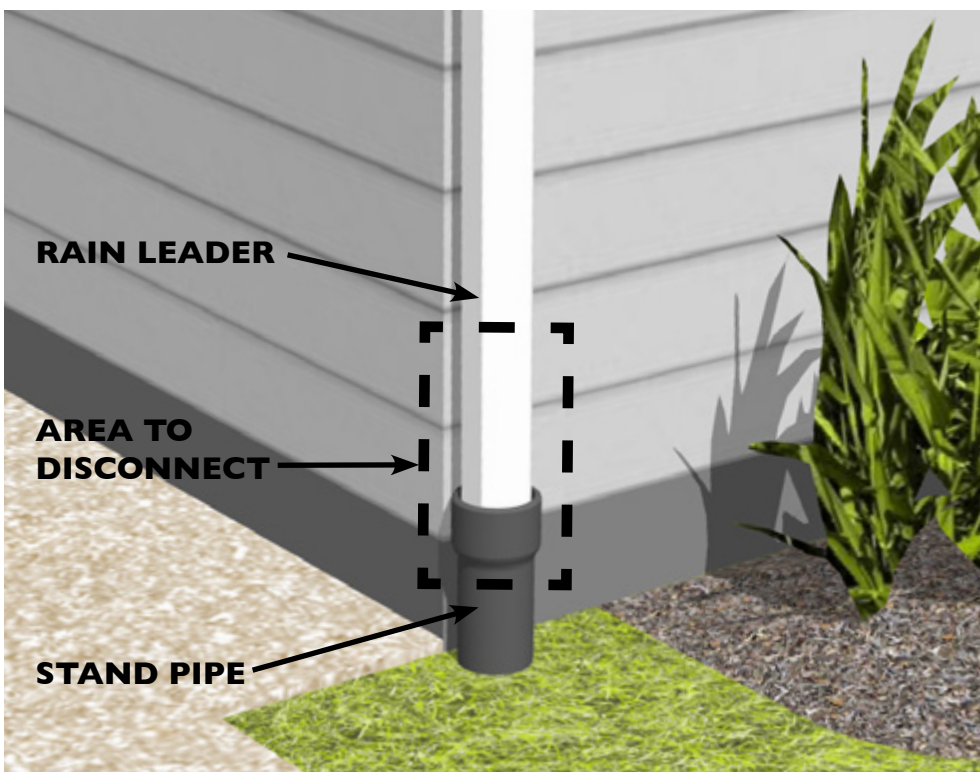
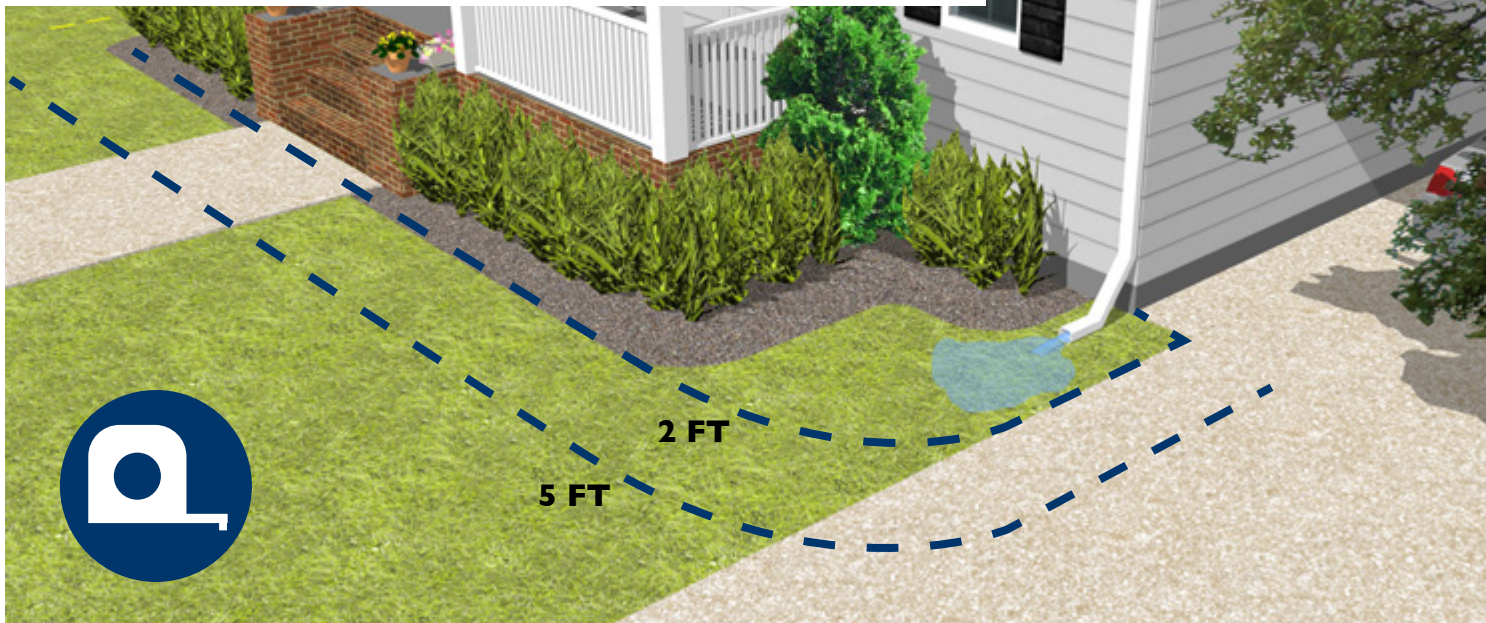
## Step 1: Water Direction

Before disconnecting a downspout, consider the following guidelines for redirecting stormwater:

The downspout should redirect rainwater away from the building at a minimum of 2 feet. For homes with crawlspaces or basements,

maintain at least 5 feet.

The downspout must be directed to permeable surfaces such as a yard, garden, forest, or a conservation landscape element. Make sure it is not directed to steep slopes. Check for drainage and compaction by doing a test Click —»



## Step 2 : Cut

Cut the existing rain-leader to redirect the rainwater from the vertical stand pipe.

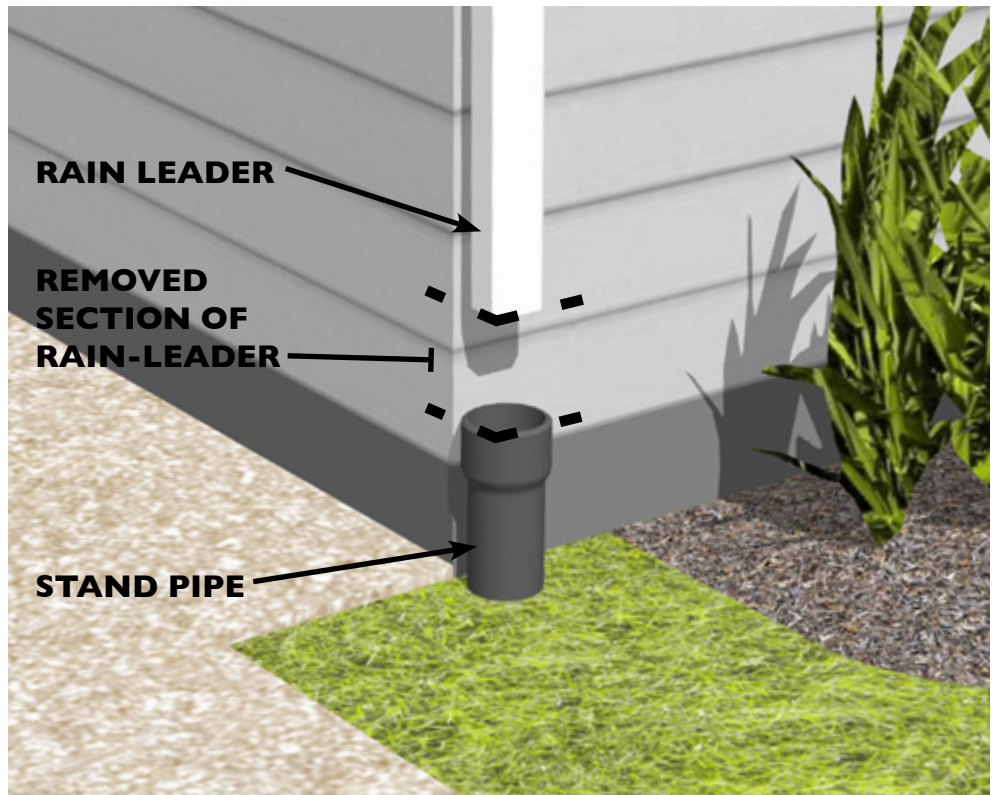
- Measure **9** inches above where the rain-leader pipe enters the ground at the standpipe. Using a hacksaw, cut the rain-leader and remove the excess pipe.
- To prevent rainwater and debris from entering, seal the standpipe with a fitting plug or cap.



### Step 3: Add

Install new elbow and extension with the hardware provide. Extra screws and screwdriver may be needed.

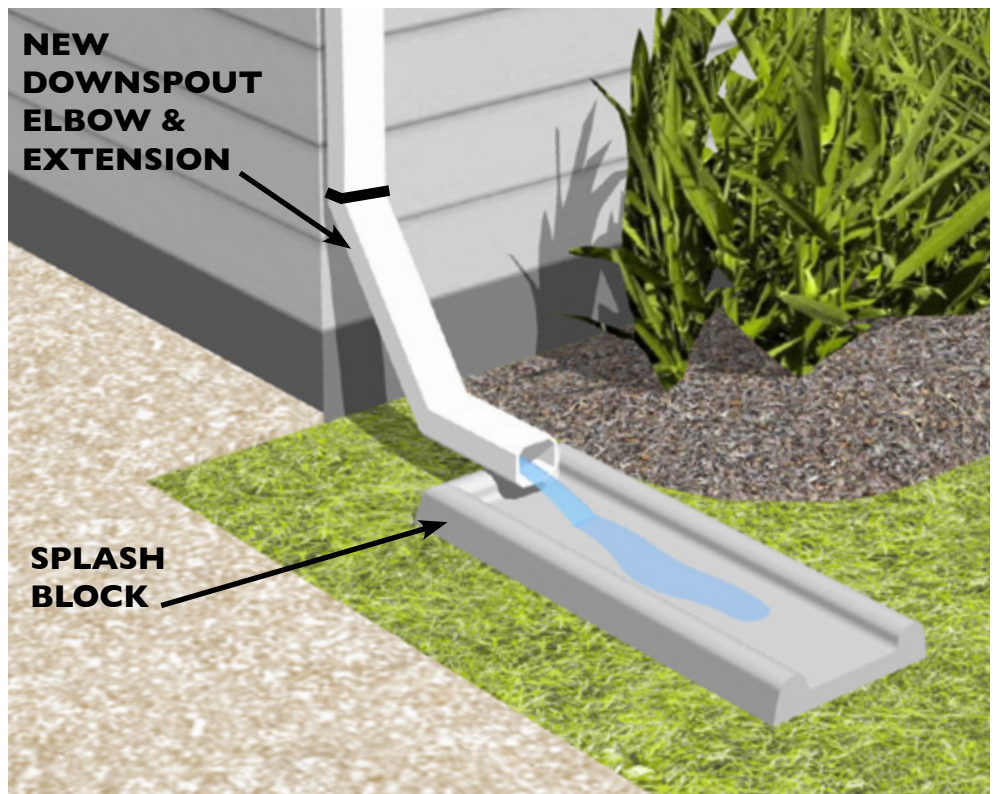
- The elbow and extension should direct the water away from the building. There are various methods to redirect the rainwater including similar downspout pipe materials, plastic hoses, and flexible extensions.



### Step 4: Erosion Control

Use a shovel or rake to level a spot to add a splash block or other erosion control device.

- Water flowing from the roof to the gutters and downspout moves very quickly and should be slowed to avoid erosion on pervious surfaces. There are several types of alternative splash blocks including plastic or stone splash guards and loose stone or rocks.
- Disconnected downspouts can be redirected to rain barrels, rain gardens, conservation landscaping, tree plantings, or various means of infiltration.



## Project Completion!



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