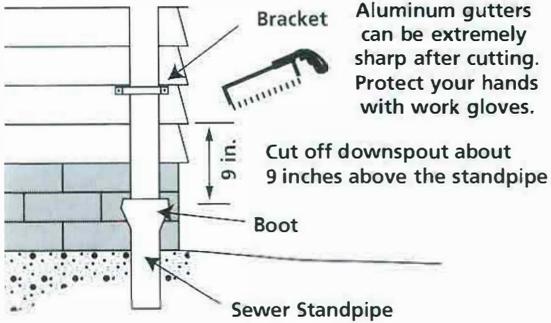


3 Cut

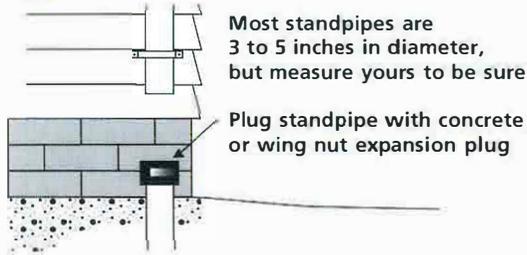


SAFETY!
Aluminum gutters can be extremely sharp after cutting. Protect your hands with work gloves.

Cut the downspout

Cut the existing downspout about 9 inches above the sewer standpipe. A hacksaw should do the job.

4 Seal



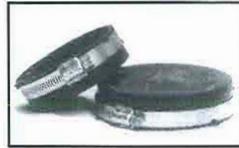
Seal the sewer standpipe

Next, seal the sewer standpipe. This prevents water getting into the city's sewer system. Once the downspout has been cut off, you have 3 options for sealing the standpipe:

4A: Seal with concrete (preferred)
Ball up a handful of newspaper and force it into the downspout standpipe. Make sure it won't slip further than 4" into the pipe. Cover with 4 cups of wet concrete and let cure.

4B: Seal with a wing nut expansion plug
make sure you have a clean mounting surface and insert the plug. Make sure the plug will seat properly and tighten the wingnut.

4C: Seal using a test cap
cut the pipe as needed. Make sure you have a clean mounting surface and slip test cap over the pipe and tighten the clamp.



Test Cap



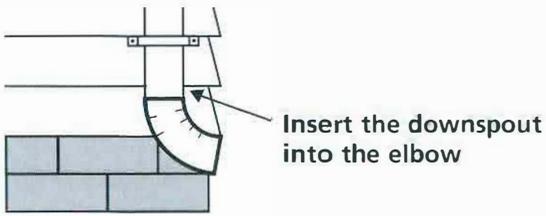
Wing Nut Expansion Plug

! After you've sealed the standpipe, have your work checked by City staff before you backfill the hole so that your disconnection can be verified and applied to your account.

! Will You Need to Secure Your Existing Downspouts?
Some downspouts are not attached to anything but the gutter and the sewer standpipe. You may need to secure your downspout to your house with a bracket to keep it in place when you disconnect.

! For areas in your yard where an extension would be inconvenient or unattractive, other options exist. You can install a "dripper flipper," a hinged downspout elbow and extension which can be flipped up against the house during dry weather or to mow the lawn.

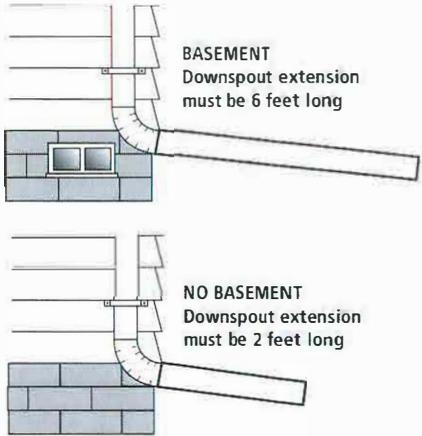
5 Attach Elbow



Attach an Elbow

Insert the downspout INTO the elbow (if you put the elbow into the downspout, it might leak). You may need to crimp the end of the downspout with a pair of pliers to get a good fit.

6 Attach Extension



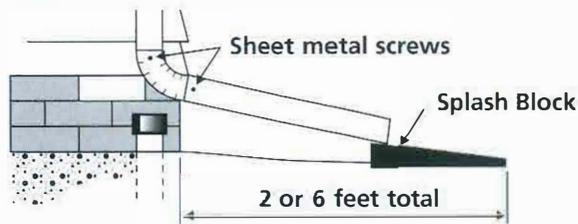
Attach a Downspout Pipe Extension

You can use a hacksaw to cut the extension to the desired length. Attach the extension to the end of the elbow, making sure the elbow fits inside it. The required length of the extension will depend on your situation.

- **If your house has a basement.** Your downspouts must drain at least *six feet* from the basement wall.
- **If your house has no basement.** Your downspout must drain the water *two feet* from the foundation (at least *six feet* from a nearby basement).

- If you use a splash block as in step 7, the extension can be shorter, but the extension plus the length of the block must be at least equal to the minimum required lengths (*six feet* from a basement, *two feet* from the foundation if no basement).
- The end of the downspout pipe extension needs to be at least *five feet* from your property line. You may need more room if your yard slopes toward your neighbor's house.

7 Secure Pieces



Secure the Pieces

Secure the elbow and the extension with sheet metal screws. It may be helpful to pre-drill holes for the screws.

Splash Block

To prevent erosion where your roof water drains, you can place a splash block at the end of the downspout extension.

8 Splash Block

SHOPPING LIST

- ✓ **Brackets** (optional)
- ✓ **Bag of quick drying concrete** (Preferred) **OR**
- ✓ **Cap or Plugs**
 - Outside standpipe diameter _____
 - Inside standpipe diameter _____
- ✓ **Downspout pipe extension**
 - Corrugated aluminum
 - Rectangular Square
 - Galvanized steel
 - Rectangular Round
 - Plastic
 - Rectangular Round
- ✓ **Elbows**
 - Angled to side
 - Angled to front
- ✓ **Sheet Metal Screws**
 - 2 per joint
- ✓ **Splash blocks** (Preferred)
- ✓ **Flex-A-Spout** (optional)
- ✓ **Dripper Flipper** (optional)
 - Angled to side
 - Angled to front

Questions & Information

Monday through Friday

7:30 AM to 4 PM

at 473-5920

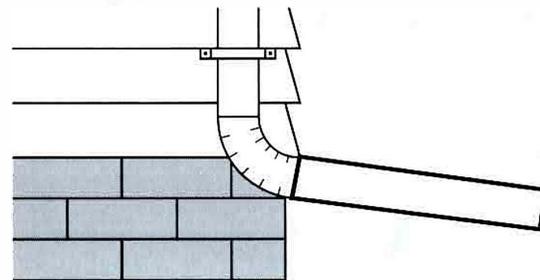
or visit our web site at

<http://www.bremertonwa.gov/472/Downspouts>



A Cooperative Approach

How To Disconnect Your Downspouts



To setup an inspection or for information, call (360) 473-5920. A follow up inspection is required to verify separation has been completed and to have the SW Facility Impact fee removed from your utility bill.

Assistance provided when requested

The "Cooperative Approach to CSO Reduction" program can provide technical assistance when requested.

How-To Video

The City of Bremerton has created a video that will show you how to separate your downspouts and safely plug the stormwater connection to your sanitary sewer service. The video can be viewed at <http://www.bremertonwa.gov/472/Downspouts>

Special Case Analysis

Many properties in Bremerton have complex storm drainage considerations that need to be evaluated, including:

- steep hills, or bank issues,
- retaining walls, or
- small lot size, or
- runoff goes to neighbors yard, and
- other concerns.

These sites will require an in depth analysis which is beyond the scope this brochure.

Assessing Your Downspouts

Before you begin, and even before you go shopping, it is helpful to look at your downspouts, figure out how you want to disconnect them, and decide what supplies you will need. Use the shopping list on the back of this brochure to assist you in identifying what you need so you purchase the necessary hardware with the correct measurements.

1 Decide Where the Water Will Go

You probably have a couple of options. Consider these safety requirement in making your decision:

- ✓ The slope of the yard must not drain water toward your house.
- ✓ Downspouts must extend at least **six feet** away from a basement and **two feet** away from a crawl space.
- ✓ The end of the downspout extension needs to be at least **five feet** from your property line. You may need more room if your yard slopes toward your neighbor's house.

Downspout pipe is generally sold in 10-foot lengths. You can cut an extension to the desired length with a hacksaw. Also, consider the many options you have for putting elbows and extensions together to get the water where you want it. For instance, you can combine elbows and extensions to send water to the side, or front, or to get around obstacles and slope problems.

! Do not disconnect a downspout if it cannot meet the above safety requirements or if you have other concerns

2 Determine What Materials You Will Need

Downspout elbows and extensions come in a few standards shapes, sizes and materials. Are yours round? Rectangular? Aluminum? Plastic?