

Installation Instructions for Your Stormwater Planter Box.

Thank you for doing your part to ease flooding in your neighborhood and installing this stormwater planter box in your yard. This kit provides everything necessary to get this project started, but since every yard is different, the following notes suggest modifications and additions that may be important for your installation. Please read all instructions before proceeding.

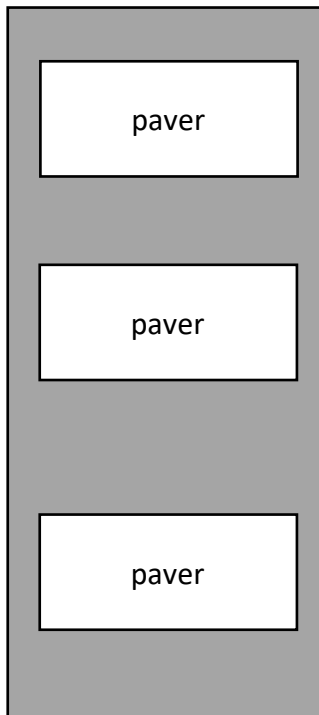
Gather the following supplies (bags are assumed to be 0.5 ft³ each):

- Stormwater planter box, 2'x4'x2' [like this one](#)
- Downspout diverter [like this one](#)
- Sheet of landscape fabric -- 1
- Concrete pavers -- 3
- Pea gravel -- 5 bags
- Sand -- 10 bags
- Topsoil -- 2-3 bags
- Leaf compost -- 1 bag
- River rocks -- 3 bags
- Native plants

Step 1: Determine the location of the planter box and install the downspout diverter.

Follow instructions for the Downspout Diverter to install it on your gutter above the placement of your planter. Note that the diverter kit should include a hose that limits your diverter's distance from the planter box. The goal is to have this hose deposit water from the gutter into the top of the planter box.

Step 2: Level the ground, position 3 pavers, and place the box on top.



Before filling the planter box, ensure its future location is level. If the planter box will rest on the ground, consider digging to create a level surface and/or tamping down gravel. If the planter box will rest on pavement, use wood shims as necessary to ensure the box is level. This step is essential because once stormwater is rushing into the box, any imperfections in its level will quickly worsen.

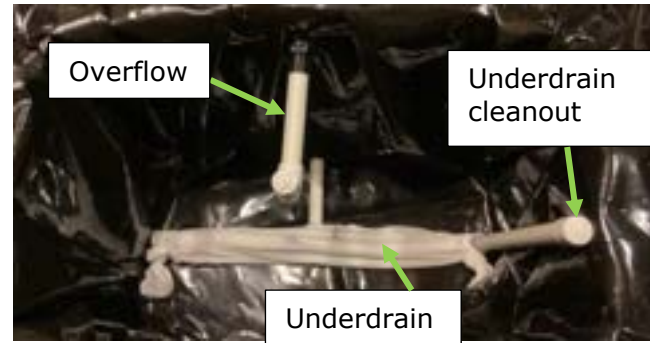
Position the three concrete pavers as noted in the diagram. The planter itself should not come in contact with the ground but should sit on the concrete pavers. Three pavers are included for this purpose, but you may wish to use additional pavers, concrete blocks, or wooden 4x4 blocks, depending on your property. The pavers prolong the life of the box, which will decay within a few years if it's in contact with the ground.

Place the box on top of the pavers, as suggested by the diagram. Check again that everything is level.

Installation Instructions for Your Stormwater Planter Box.

Step 3: Fill the box with 4" of gravel.

Cover the underdrain apparatus (see diagram) with pea gravel. As you are pouring the gravel, slightly raise the underdrain so that it will drain out of the box. The underdrain and gravel help ensure that excess water does not pool in the bottom of the box.



Step 4: Cover the gravel with filter fabric.

Use the black landscape fabric to cover the layer of gravel and prevent the soil from mixing with it.

Step 5: Fill the box with 12" of sand, soil & leaf litter mix.

Ideally, use a large tub to premix the 10 bags of sand with 2-3 bags of topsoil and 1 bag of leaf compost. If this is not possible, add items in layers, gently mixing as you go. As you fill the box with the soil mix, slightly raise the overflow so that it is oriented to drain out of the box.

Step 6: Add native plants to the soil mix.

Refer to resources at the end of this document to select native plants accustomed to flooding and drought conditions.

Native plants are available locally through the following vendors:

- [Bowman's Hill Wildflower Preserve](#) has a native plant nursery open from 10 am to 4 pm every day that the Preserve is open where you are sure to find a wide variety of plants.
- [Toadshade Wildflower Farm](#) is primarily a mail-order nursery, though pick-up can be arranged in Frenchtown. You can use their webpage to review selections and then place your order online.
- [D & R Greenway](#) hosts two native plant sales a year, and the next one is right around the corner on Sept 6, 7, and 11. [Learn more here.](#)
- [FoHVOS Community Conservation program](#) allows FOVOS members to place bulk orders for native plants twice a year (in April and August). While you must first join FOHVOS, the bulk pricing often makes it worthwhile.

Step 7: Add river rocks to the top.

Place a 2-3 inch layer of river rocks around the plants and on top of the soil. This step is vital to prevent erosion as water rushes into the box. The perforated cap of

Installation Instructions for Your Stormwater Planter Box.

the overflow should pop up just at the level of the river rocks to capture excess water. Similarly, the end cap of the underdrain cleanout should pop up and be accessible for any necessary maintenance.

Additional options

Depending on the layout of your home, the two 1" PVC pipes exiting the box can be attached to soaker hoses, diverted away from the box, or back into your gutter. Each of these options will require extra pieces not included in the [2'x4'x2' setup instructions](#).

Resources:

- *Conceptual Residential Flow-Through Planter Box Design*, available at <http://archive.phillywatersheds.org/doc/Conceptual%20Flow-Through%20Planter%20Box.pdf>
- *Planter Box Installation Steps*, available at <http://archive.phillywatersheds.org/doc/Install%20steps.pdf>
- *How to Build a Downspout Planter*, available at <https://drive.google.com/file/d/1ObY5DhgI8hSOqRB9NGFVGe1bSn17CE6v/view>
- *Metal Downspout Planters*, available at www.pwdraincheck.org/en/stormwater-tools/metal-downspout-planters
- *Planting Guide: Downspout Planter*, available at www.pwdraincheck.org/images/documents/PlantingGuide_DownspoutPlanter_18.10.25.pdf