



Blue Thumb



DIY Cascading Falls Pond-Less Kit Installation Manual

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This
Installation
Video is on
our YouTube
Channel!

For use with
Mini Cascading Falls Kit #PB1373
20" Cascading Falls Kit #PB1854

Included in this Pond-Less Falls Kit:

The DIY kits come complete with all the necessary equipment to complete the installation including:

- Cascade Box
- Canyon Matrix



Choosing Your Pond-Less Waterfall Location

The waterfall is best positioned so that you can view it from the outdoor and indoor areas where you plan to enjoy your new water feature.

STEP 1 Plan and Prep Basin area

1a Set the Canyon Matrix into position and mark accordingly so you'll know how big of an area to excavate.

1b At this time it's a good idea to determine the placement of the Cascade Box and form a rough estimate of the path that the stream will take to enter into the basin.



Please remember to call your local utility company prior to digging to ensure there are no utilities in the excavated area. Also, you will want to remove any sharp roots and rocks that might puncture your liner.



STEP 2

Excavate Basin area

Dig the basin area to the length and depth of the Canyon Matrix while over-digging the width at least 6" so the two slotted sides will have an extra 3 inches on each side.

Dig the hole 28" long x 22" wide x 13" deep.

Canyon Matrix Specs



STEP 3

Install Protective Underliner & Rubber Liner

3a Underliner - Unfold the protective underliner and lay it in the basin. Work your way from the bottom out to ensure the underliner is installed properly running it up the stream as far as possible. It's ok if the underlayment doesn't go all the way up to the Cascade Box.

3b Rubber Liner - As you unfold the rubber liner you'll notice it is longer than it is wide. Center width-wise in the basin on top of the underliner. The length should reach past your waterfall box placement.

Keep a 6" overhang all around the basin and up the streambed. Do not cut any of the excess liner at this point.

- Submersible Pump
- Pump discharge assembly

- Black PVC flexible hose
- Protective underliner

- Rubber EPDM liner
- Instructions

STEP 4 Install the Canyon Matrix

Now that you have the underliner and liner installed, place the Canyon Matrix into position. It should be somewhat tight on the **short ends** of the Canyon Matrix and centered with 3" of space on both long sides. This will allow water to run through the slots and into the Canyon Matrix to the pump.



STEP 5 Inside the Liners - Fill in the Long Sides

Using smaller stone such as river rock, fill both 3" spaces on the long sides between the liner and the Canyon Matrix. These stones should be large enough that they won't slide through the slots into the Canyon Matrix. This stone will help filter the water before entering into the Canyon Matrix where the pump will sit.



Tip: Pre-rinse all stones before placing in your stream. This will help keep water cleaner during start up.

STEP 6 Outside the Liners - Backfill the Short Sides

Next, lift the liners up and backfill around the short sides of the Canyon Matrix using topsoil or sand. Make sure to pack down to prevent future settling.





7a

STEP 7

Stream Outline

7a Next, pull back the stream liner and lay over the installed Canyon Matrix while you determine the path that the waterfall and stream will take to enter into the basin.



7b

7b Using paint will help keep a visual reference of what you're working towards.



8a

STEP 8

Waterfall Drops

8a Dig out the waterfall drops you'd like to create, shaping the soil to create the drops.



8b

8b You may rough in the placement of your key boulders. Be creative!



9a

STEP 9

Hose Placement

9a - Dig out area for Cascade Falls Box placement making sure it will sit on packed and leveled ground.



9b

9b Now dig a path for the hose from the Canyon Matrix up to the Cascade Box. Move the Cascade Box aside.

AUTOFILL INSTALLATION



A



B



C



D

(A) Take the autofill valve and remove the nut from the threading, leaving the O ring on the valve. (B) Loosen the wing nut. (C) Straighten autofill and tighten wingnut (D) Apply thread tape to the valve threading then thread the valve into the spin weld on the inside of the basin.



STEP 10

Line the Streambed

10a Pull underliner up the streambed as far as it reaches and press into trench. Next, pull rubber liner up to the top of the streambed, past where the Cascade Falls Box will sit.

10b Place flex hose in trench on top of the liner.



STEP 11

Connecting the Pump

11a Screw the Discharge Assembly on to the pump outlet and place in the Canyon Matrix. Feed flex hose through the hole in the side of the Canyon Matrix

11b Connect hose to the discharge assembly using a screw or nut driver to tighten down the hose clamps.



STEP 12

Set up Cascade Box

12a Thread the PVC elbow into the spinweld on the Cascade box that you will be connecting to the hose.

12b Plug the spinweld on other side of the Cascade Box with the PVC plug.



(E) Remove the threaded cap on the outside spin weld of the basin. (F) If you are using a garden hose connection, you will take the half inch nipple, apply thread tape, and insert it into the outside spin weld. (F) Taking the independent garden hose attachment and thread it onto the nipple. (H) Connect your water source.



STEP 13 Measure and Trim Flex Hose



Set Cascade Box in position on the liner. Estimate where the black flex hose will need to be trimmed to accommodate its connection to the Cascade Box then trim away any excess hose.



STEP 14 Connect Hose to Cascade Falls Box



Using the supplied PVC Cement, attach the flexible hose to the PVC elbow on the Cascade Box. Hold it in position for 60 seconds to allow the cement to set.



STEP 15 Adjusting the Cascade Box

Snug up the Cascade Box and attached flex hose by pressing into the liner.

Level the Cascade Box so that the water spills out over the waterfall spillway evenly. Backfill as needed for adjustment.



STEP 16 Filling the Basin



At this point you can begin filling the basin with water while you complete the rest of the steps. Along the way it's a good idea to wash off any dust from your rockwork.

LIGHTING



Now is an ideal time to consider the lighting and positioning of light locations while placing the stones for your feature. We recommend the Fountain and Pond 3-Light Kit as an excellent lighting option.

STEP 17 Placing Rockwork



Place rock work at the end of the stream area either just in front of the matrix or if you are tight on space you can position your boulders on top of the Canyon Matrix.

ROCKWORK TIPS

Rinsing the dirt off your rocks before placing them will help your stream clear more quickly.

Don't worry if this is your first time, let the creative juices flow. If you don't like it, move some rocks around until you do!



STEP 18 Foaming

Use included PondBuild'n Foam to seal in and around the rockwork. This forces the water over the top of the rocks instead of around and beneath them. It greatly enhances the waterfall effect and will help to seal everything together.



STEP 19 Trim Liner

You can trim away any excess liner but we recommend leaving at least 6" along each edge and folding it back into the landscape. This will allow you to adjust if settling occurs in the future.



Plug in Your Pump and ENJOY!

Your stream may appear slightly muddy at first. Be patient—this is a natural process, and the water will gradually clear as the system settles.

Basin Layout Recommendations

Basin Layout Recommendations

Blue Thumb DIY Cascading Falls Kits



Recommended Routine Water Treatments

Water treatment use depends on product, time of season, and condition of the water feature. Use as directed. Safe for wildlife, birds, and pets.



Muck Buster® Dissolving Tablets - Muck Reducer

Accelerates the decomposition of organic matter caused by rotting leaves and algae. Muck Buster's multi-purpose cleaning action cleans ponds with an unprecedented combination of activated barley, natural bacteria, enzymes, and a powerful secret ingredient. Item# PB2682

Pond Fix® Dry - Pond Cleaner

Use to simply "lift" debris from waterfalls, streams, rocks and anywhere debris occurs. This granular product works on contact, adding oxygen to the pond and removing odor.

Apply on a schedule opposite of Muck Buster, so it won't interfere with its beneficial bacteria maintenance processes.

Item# PB2057



Now, snap a picture of your completed waterfall and post it to our Facebook page at facebook.com/bluethumbinc!

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