



DIY Cascading Falls Pond-Less Kit Installation Manual



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

**Included
in this
Pond-Less
Falls Kit:**

- Cascade Falls Box
- Submersible Blue Thumb Pump
- Mini Pump Canyon® (Vault)
- Pump and Discharge Assembly

- Small Basin Matrix
- Black PVC Flex Pipe
- Protective Underliner
- Installation Kit



STEP 1

Assemble Basin Matrix

Lay out one 26½" x 16" panel as your bottom panel. Next, position and push in the four 16" x 9" pronged support panels into the 1st, 3rd, 5th, and 7th rows of holes in the bottom panel. Now take the other 26½" x 16" panel, put it into position as your top panel and push it onto the prongs of the vertical support panels. Lastly take the two 26½" x 9" side panels and push them into place on the prongs on each side.

***TIP:** Wearing a work glove will protect your hand while pushing down the matrix panels during assembly. If you need to you can use a rubber mallet to tap the panels onto the prongs. Do NOT use a metal hammer; it may break the matrix panel.*



STEP 2

Excavate Basin Area

The basin area will be the water reservoir at the base of our waterfall. Use the excavated dirt from the basin area to build up and create your waterfall area.

It will need to be approximately 28" wide and 30" long. To check for fit, the basin matrix will lay at the end of the basin closest to the waterfall; it should be positioned with the 26½" length running side to side in the basin and the large 16" wide panels forming the top and bottom. The area in the basin where the matrix lies should be dug approximately 12" deep. The Mini Pump Canyon® will go in the end of the basin opposite the waterfall. The area in the basin opposite the waterfall should be dug approximately 17" deep. The Pump Canyon® can be positioned anywhere along the 26½" length of the matrix. The closer you move it to the right side of the matrix the further the flex pipe can reach, this will play a part in how long you can make your waterfall.

10" Mini Box
up to 3ft
long stream



20" Box
up to 7ft
long stream



After digging a basin and installing our Basin Matrix & Liner, it's simple to install the Pump and Check Valve Assembly inside a Pump Canyon®. The Pump pushes water through the PVC Flex Hose up to the Cascade Falls Box. From there, water flows back into the lined basin and continues to recirculate.

STEP 3

Lay Liner

This is a single liner construction, and all components including the Cascade Falls Box will sit inside of the protective underliner area. When positioning the liner be sure that it is contoured into the basin area to prevent any voids under the liner. One end of the liner should start a few inches beyond the edge of the basin, opposite the waterfall. The liner will run down through the basin, up the falls and behind the Cascade Falls Box.



STEP 4

Set Pump Canyon® & Basin Matrix

Place the basin matrix into the area just below the falls that was dug to approximately 12" deep, the 26½" length should be running side to side and the 9½" dimension of the matrix should be its height.

Place the Pump Canyon® into the other deeper area of the basin that was dug to approximately 17" deep. Remember... if you position your canyon closer to the right side of the matrix you will have more flexibility with your flex hose throughout the installation. The Pump Canyon® discharge hole should be facing toward the right side of the matrix, in the direction that the pipe will be run.



STEP 5

Attach Flex Hose to the Pump

Place the pump and discharge assembly into the Pump Canyon® with the rubber discharge coupling facing the Pump Canyon® discharge hole. Run the 1" flexible PVC pipe into the discharge hole and attach into the rubber coupling on the pump discharge assembly; be sure both hose clamps are tight.



STEP 6

Construct the Waterfall

Position the Cascade Falls Box at the top of the waterfall area inside of the liner area. Push the top end of the flex hose into the Uniseal® fitting on the right side of the falls box. Bring the top edge of the liner up the backside of the Cascade Falls Box and backfill with some soil around the back and sides of the falls box to help secure it in place while you build the waterfall (remember that the Cascade Falls Box and the flex hose are set inside of the liner area).

When constructing the waterfall you can begin the base of your waterfall by placing the first foundation stone(s) either just above the matrix on the stream liner or right on the matrix. By starting the base of the falls over the matrix you can extend the run of the water giving you a longer waterfall/stream.

Continue placing your waterfall stones and gradually work your way up to the Cascade Falls Box. Try to finish so that the first stone in front of the falls box sets just below the lip of the box, also frame in the sides of the Cascade Falls Box with a couple of stones that set right next to the lip on both sides.

To finish the falls bring the soil up to the final grade around the back and sides of the Cascade Falls Box. Fill the landscape lid of the Falls Box with gravel and plants.

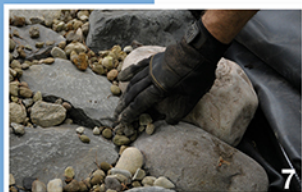
STEP 7

Add Gravel / Finish Edges

Finish the basin area using gravel, but mark the location of the Pump Canyon® by positioning a small boulder on the lid; this "marker" boulder will help you to locate the Pump Canyon® when you need to access it for maintenance.

Trim away the excess liner leaving an overhang of a few inches around the entire perimeter. This will allow you to adjust later, should any mild settling occur. Hide this extra edge liner when finishing your edge work.

Blend your water feature into the surrounding landscape using any number of edge treatments, e.g., rocks, gravel, mulch, plants.



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

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