



## INSTALLATION INSTRUCTIONS

Item #PBSCF

### Step 1: Unpack Kit & Assemble Matrix Box:

Assemble the basin matrix box by laying one of the largest panels on the ground. Each of the four smallest panels can then be pushed into position by hand, noting that two of the panels will make the ends of the box. Next, take the largest remaining panel and snap it into place to create the top of the box. Finally, the two remaining panels will create the sides of the matrix box.



### Step 2: Excavate Basin Area:

Remember to call your local utility company prior to digging to ensure there are no pipes & cables in the area. Set the basin matrix box/boxes and pump canyon into position and mark accordingly so you'll know how big of an area to excavate. Refer to the diagrams for basin size and depth recommendations based on the size of kit being installed. Determine the placement of the Cascade Box and the path that the waterfall & stream will take to enter into the basin & pump canyon, spray paint outline. Dig area to the correct size and depth. Remove any roots and/or sharp edges so they won't puncture the rubber liner.



### Step 3: Install Protective Underliner & Rubber Liner:

Unfold the protective underliner and lay it in the basin. Work your way from the bottom out to ensure the underliner is installed properly. Trim off any excess underliner but keep it as we'll be using that shortly. Unfold & layout the rubber liner in the same

way. Install the basin liner so that it's square within the basin. Next, lay the excess underliner you cut off earlier on top of the liner. This will create a cushion between the liner and the matrix box. With smaller kits it is best to install the liner so that you have a 6" overhang all around the basin with the rest of the liner being used to create the waterfall and stream.



### Step 4: Install Pump Canyon and Matrix Box:

Place the basin matrix boxes and pump canyon into position. Position the pump canyon with the discharge hole facing towards the side of the feature where the flexible hose will be placed.



### Step 5: Lay Hose & Install Pump:

Lay the black flexible hose into position, placing one end of the flexible hose into the hole provided on the side of the pump canyon. Unwind the hose up towards the Cascade Box and cut off any excess. Thread the check valve assembly onto the pump. Set the pump inside the pump canyon and connect the black flexible hose to the pump discharge using hose clamps. Note the notch on the top of the pump canyon - this is where you'll bring the pump power cord through. Snap the lid of the pump canyon into place.



### Step 6: Finish Basin Area:

Fill the open areas between the matrix boxes and pump canyon with larger boulders near the bottom working your way up with smaller boulders. Using topsoil or sand, back-fill all four sides of the basin area and pack down to prevent future settling.

### Step 7: Build Waterfall & Stream:

Shape the soil to create the waterfall drops you'd like. Next, level the area that the Elite Cascade Box will be setting on. It's important that the box be installed level so that water spills out over the waterfall weir evenly.



## Step 7: Continued

The Elite Cascade Box is plumbed with a spin weld fitting on both ends. Teflon tape the male adapter and thread it into spin weld for flexible hose. Teflon tape the threaded plug and install that into the spin weld on the other side of the box. If preferred, you can add a light bead of silicone to the fittings prior to installation.

Set the Cascade box into position and using the PVC Cement supplied install the flexible hose into the male adapter of the Cascade box. Be sure to wipe off any dirt prior to using cement, no primer needed. Check the level of the cascade box at this point and backfill with topsoil to ensure that it stays in position.



Install the waterfall and stream liner (if separate from basin liner). Lay the liner so that there's enough to overlap the basin liner by at least 6" and also so there's enough liner at the top of the waterfalls to attach to the Cascade Box.

Trim any excess waterfall liner away, leave enough to tuck down into the basin. Lay the basin liner up the streambed as far as possible and then lay the waterfall liner on top of the basin liner. This will ensure water won't leak when flowing from the waterfall into the basin.



Place rockwork at the end of the stream area. Complete the waterfall & stream area. Be sure that the Cascade box remains level throughout the process so that the water flows out evenly when finished.

Attach the waterfall liner to the Elite Cascade Box. Refer to the instructions supplied with the Cascade Box for assistance.

## Step 8:

### Backfill Around Edges of Waterfall & Stream:

Fold back the liner along the left and right edges of the waterfall and stream. Add in soil or sand to ensure that the edges are high enough that the water won't leak out. You can trim away any excess liner leaving at least 12" along each edge and folding it back into the landscape. Finish rocking the basin area and add smaller gravel to fill in the voids between the rockwork. Use gravel that is 1-1.5" in size so that it won't fall through the panels of the matrix box. Finish rocking



in the area around the Cascade box making sure not to place any rockwork that will pull away the liner from the Cascade box. Begin filling the basin with water while completing the rest of the steps. Wash off any dust from your rockwork.

## Step 8.5:

### Use Black Foam:

This foam is used to seal in and around the rockwork of the waterfall. It's black in color and can be cut away once cured if it expands too much. Before curing completely you can sprinkle some rock dust on the foam to disguise it.



## Step 9:

### Finishing Touches:

The Landscape Lid assists in hiding the black plastic of the Cascade Box. Holes in the bottom of the lid allow the root system of the plants to always have flowing water around them.



Build up the area behind the Cascade box using rockwork and soil or gradually slope the soil back to grade. Finish all

edges of the water feature by folding the liner and adding gravel, rocks, or mulch. Leave a little liner folded up in case of settling in the future. Place a flat rock on top of the pump canyon lid and surround it with gravel. This will be your identifying rock when you need to access your pump.



If desired, adding aquatic plants will really help to bring your new water feature to life. Sometimes you can remove one of your boulders or rocks and put a plant in its place. Make sure the aquatic plants are planted so that they will have access to water at all times.

## Step 10:

### Plug in Pump and Enjoy!

Plug in the pump and watch the Cascading Falls for the first time. Move some rocks around to get the waterfall to look exactly the way you want it.

### One last thing!

When you get your feature created and you want to show it off to others, snap a hi-res picture and submit it on our website at [www.pondbuilder.com](http://www.pondbuilder.com). We look forward to seeing your work of art on our website soon!

