

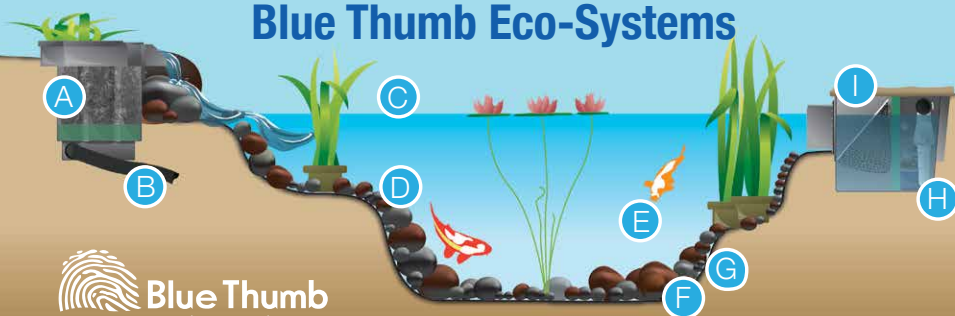


Water Garden Elite Pond Kits Installation Manual



For use with
14", 22" and 30" Elite Waterfall Kits
#PB1250, #PB1267, #PB1276,
#PBE1621K, #PBE2126K

Blue Thumb Eco-Systems



Blue Thumb
Ponds / Waterfalls / Fountains

About Our Complete Elite Pond Eco-System

A Biological Waterfall Boxes
Filters harmful waste and toxins from water, keeping your pond clean and clear. Provides excellent surface area for beneficial bacteria growth while making a simple and artistic way of creating a waterfall. Easy to camouflage-especially when using the Landscape Lid.

B Black PVC Flex Hose
Carries water from skimmer box up to the biological waterfall box. Much easier to install than rigid PVC.

C Aquatic Plants
Add beauty to any pond! Plants can be placed throughout the pond or along the pond's edge. There are many varieties: floating, marginal, sinking, oxygenators and lilies. Water garden kits are great when your desire is to keep many colorful and beautiful aquatic plants.

D Rocks & Gravel
Provides additional surface area for beneficial bacteria to colonize. Protects liner from harmful UV rays and damage from animals. Creates a very natural look.

E Fish
Adding colorful Koi and Goldfish creates an even more dramatic display. Water gardens are great for Goldfish and Koi.

F Protective Underliner
A non-woven, protective underliner fabric forms a soft padding for the liner. Installs much quicker than newspaper and covers the vertical walls unlike a sand base. Unlike carpeting, it allows gases to escape out the sides from the earth's soil.

G Fish-Friendly Rubber Liner
Super-strong 45-mil EPDM liner is the best choice when building a pond. Very flexible - conforms to pond's curves and slopes.

H High-Efficiency Pump
Pump sits in back pump chamber protected from clogging by nets and filter mats. Blue Thumb pumps are recommended as they will use far less electricity and are meant to operate continuously.

I Mechanical Skimmer Box
Simplifies routine maintenance by removing floating debris before it sinks to the bottom of the pond. Protects the pump and hides unsightly plumbing.

Included in Your Elite Pond Kit:

- Fish-friendly Rubber Liner
- Protective Underliner
- Elite Mechanical Skimmer
- Elite Biological Waterfall
- Solids Handling Pump
- Check Valve Assembly
- Black PVC Flex Pipe
- LED 3-Light Kit with Transformer
- Installation kit with Black Foam and adhesives
- Pond Maintenance Kit — Enough to treat the pond for the entire first season!

STEP 1

Determine Pond Shape & Spray Outline

The first step to installing your new water garden is to lay out a garden hose on the ground to help create the size and shape of your new pond. Locate the pond near the house, patio, deck or other living areas for the best views and interaction with the fish and waterfalls. Determine the shape of your pond then outline using a can of spray paint. Once you've sprayed the outline you can remove the garden hose but keep it handy — you're going to need it later!



STEP 2

Position Filtration Boxes & Flexible Hose

After removing all products from the kit, place your Waterfall and Skimmer Boxes in the desired locations. Keep in mind that whenever possible the skimmer and waterfall should be placed at opposite ends of the pond. Next, lay the PVC Flex Hose into position.



NOTE: Refer to the Elite Waterfall and Skimmer Installation Guides for detailed instructions.

STEP 3

Attach Flex Hose to Waterfall Box

3a Install the plumbing fittings into the spinwelds located on each side of the Waterfall Box. Teflon tape the male adapter, and thread it into the side of the box that you will be bringing the black PVC Flex Hose into. You can add a bead of silicone to the threads for added insurance. Next, Teflon tape the Threaded Plug and install into the spinweld on the other side of the box.



3b Set the Waterfall Box into position and wipe off any dirt before installing the Flex Hose into the male adapter using the PVC Cement supplied. Hold it in position for 60 seconds to allow the cement to set.

Remember to call your local utility company prior to digging to ensure there are no pipes & cables in the area.



Other recommended installation aids:

- Spray paint
- Garden hose
- Shovels, rake, & level
- Laser level or string
- Utility knife & screwdriver
- A few large boulders for the waterfall, several medium boulders for design and plenty of river rock or gravel for fill
- Landscaping accents
- Fish and Aquatic Plants at your preference

STEP 4

Excavation of Pond Area

4a Outline the area to be excavated for the Skimmer Box placement, then set it aside during excavation.

4b Check to make sure the Waterfall Box remains level during excavation. If it is installed off-level, the water will not flow evenly over the weir. Tamping the area beneath the Waterfall Box will help minimize settling, which may create an uneven waterfall. Excavated soil can be used to cover the Flex Hose, to build up your waterfall and stream, and to create a berm around and behind the Waterfall Box.

4c You should excavate your pond with at least two levels. Excavate the pond down as deep as you'd like your first level to be. Once the first level is dug out completely, spray outline the area that will become the deeper portion of the pond. The size and shape of this area is completely up to you but keep in mind that we'll be filling this area later with boulders that will take up some of the space. The use of a laser level is very helpful in determining whether the sides of your pond are level, a string level works too.

4d Excavate the area beneath the Skimmer Box until the desired height is achieved, checking to ensure that the Skimmer Box is level. Once the skimmer has been installed, you can bring your flexible hose into the Skimmer Box by pushing it through the rubber fitting. Push it in as far as necessary, you can cut off any excess when we install the pump.

4e Now is a good time to install the overflow hose if you are installing an Elite Skimmer. Use any extra flexible hose from the kit to take the overflow water from the skimmer to a French style drain or to wherever drainage is available in your yard. Trench out an area for the hose to lay. Connect the hose to the male adapter on the skimmer using the PVC Cement. Back-fill around the sides using the excavated soil, tamping lightly to prevent settling. It's best to stand inside the skimmer to prevent it from shifting around while adding the soil.

Finish off the pond excavation by removing any roots and/or sharp edges so they won't puncture the rubber liner. Rake out the flat areas in preparation for the underliner and liner.



STEP 5

Install Pump in Skimmer

Using a clockwise motion thread the check valve assembly onto the pump. Next, you'll want to set the pump inside the skimmer box and cut away any excess pipe. Connect the black flexible hose to the pump discharge using a screw or nut driver to tighten down the hose clamps. Note the notch at the top of the skimmer along the back—this is where you'll bring the pump power cord through.



STEP 6

Install Underliner & Fish-Friendly Liner

6a Unfold the protective underliner and lay it in the pond squarely. Work your way from the bottom out to ensure the underliner is installed properly. Hold underliner in place with a couple boulders until the liner is installed.



6b Next, unfold the rubber liner and lay it in the pond on top of the underliner again working your way from the bottom out. You want the liner to be able to lay along top the underliner without any tautness.

Note: Be sure you are using a fish-friendly liner. We recommend a 45mil, rubber, EPDM liner.



STEP 7

Attach Liner to Skimmer Box

It's now time to attach the pond liner to the Skimmer Box. **Refer to the instructions included with the skimmer box for exact instruction.**



Add Extra Waterfall & Stream Liner (optional)

One option for creating your waterfall is to have the waterfall box right at the edge so that the water falls directly into the pond. However, we find that most pond owners like to have their waterfall box set back a bit so that they can create a streambed. If you decide to do this you will need a second piece of liner to create your stream. Lay the stream liner so that there's enough to overlap the pond liner by at least 6" and also so that there's enough liner at the top of the waterfall to attach to the Waterfall Box. Trim any excess waterfall liner away but leave enough to tuck down over the pond liner. Lay the pond liner up the streambed as far as possible and then lay the waterfall liner over top the pond liner. This will ensure water won't leak when flowing from the waterfall into the pond. Once the stream liner is installed on top of the pond liner and in position you can complete rocking in this area.

STEP 8

Add Boulders & Rockwork

You typically want to begin rocking the pond from the deepest area out. Complete rocking in the entire pond but don't complete the area where your stream or waterfall will enter the pond. Around the backside of your waterfall box, use some boulders to help create your berm.

STEP 9

Attach Liner to Waterfall Box

Refer to the instructions provided with the waterfall box for assistance. Once the liner has been installed on the waterfall box you can complete rocking in your waterfall and streambed.

STEP 10

Add Gravel

Use gravel to fill in the areas between the boulders. This will help keep the boulders in place as well as hide the black liner completely.

STEP 11

Underwater Lights

Underwater lights can create stunning, romantic images in ponds and make the pond safer for visitors at night. They also extend the enjoyment of your new pond into the evening hours. The Elite Pond kits come with a 3-pack light kit. If you want to add additional lights, consult your local Blue Thumb Dealer for assistance. Be sure to install the lights with enough cord slack so that you can bring the fixture out of the water when changing out a burned out bulb. Run the cord around and between the rockwork so that it is hidden from view.

STEP 12

Add Aquatic Plants

Adding aquatic plants will really help to bring your new water feature to life. Sometimes you can remove a boulder or rock and put a plant in its place. This will help give your display a softer and finished look. You can either direct root your plants into the pond or simply set the plant and pot into the pond.



STEP 13

Fill'er Up

At this point you can begin filling the pond 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. If desired, you can then pump out the dirty water a few times before a final filling.



STEP 14

Pond Build'n Black Waterfall Foam

Included in our Elite Pond Kits is a can of Pond Build'n Foam. It is used to seal in and around the rockwork of the waterfall. 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. 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 15

Add Biological Media

Even the best waterfall boxes are not filters unless biological media is added to them to grow and hold the beneficial bacteria that keeps water healthy and clear.

15a The Elite Waterfall Kit includes two green Matala filtering mats and a mesh media bag. Position the filter mats horizontally in the bottom of the waterfall box.



Fill the media bag with biological media of your choosing (not included) and placed on top of the filter mats.



15b We recommend using Bacti-Twist Biological Media. This media is lightweight, easy to fit, and provides the surface area to grow beneficial bacteria necessary to keep water clear and healthy.

15c Keep in mind that you can always upgrade this filtration media as your pond matures, such as vertically placed Matala mats for superior filtration.





STEP 16

Creating a Natural Falls Look

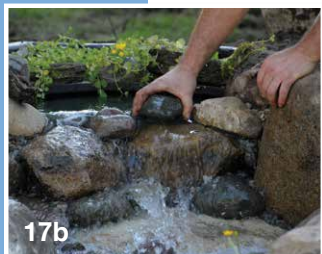
The Blue Thumb Elite Waterfall Box is the only system on the market that comes complete with the Landscape Lid! Once you've added the biological media, disguise the Waterfall Box from view by using some mulch, gravel, slate, driftwood and a selection of creeping aquatic plants. Because the Elite Landscape Lid is designed with holes in the bottom, the root system of the plants will always have flowing water around them.



STEP 17

Finishing Touches

After the pond is full and you can see that there are no low areas or leaks, you can trim the excess liner but we recommend leaving at least 12" along each edge and folding it back into the landscape. **17a** Hide the extra liner by folding it behind or under the rocks and mulch along the edge. Another option is to dig away the soil beneath the liner, creating an area for the liner to lay with topsoil added back over top. This will allow you to bring your landscaping that much closer to the pond edge. Leave as much excess liner as possible to allow for settling and future repair. Once you've taken care of the ponds edges, mulch can be added to give your feature a finished look. **17b** Add in some landscape plants around your new pond to really set it off!



STEP 18

Add Start-up Water Treatments

If you are filling your pond with chlorinated water you will want to add a de-chlorinator. Chlorine is not good for fish and aquatic plants. Next, add beneficial bacteria to the pond. It will seed throughout the bio media located inside the Waterfall Box as well as spread throughout the rest of the pond. This bacteria will help consume excess nutrients in the pond as well as process any waste from the fish.

Turn It On!

Clean up any scraps and remaining materials then plug in pump and enjoy! Move some rocks around to get the waterfall to look exactly the way you want it. And remember, it's your waterfall, make it the way you like it!



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

www.shopbluethumb.com

