



## Thank you for choosing the BioFalls® Filter. At

Aquascape we connect people to water the way nature intended. Since 1991 we've been creating and field-testing water features in order to provide you with the most reliable products and best value in the water gardening industry.



# BioFalls® 1000 Filter

Aquascape's BioFalls Filter provides critical filtration to a pond in the form of a beautiful waterfall. Durable rotational-molded polyethylene ensures maximum strength, and withstands whatever Mother Nature can dish out. All Aquascape BioFalls Filters include a lifetime warranty.

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General Maintenance	

#### Contact Us

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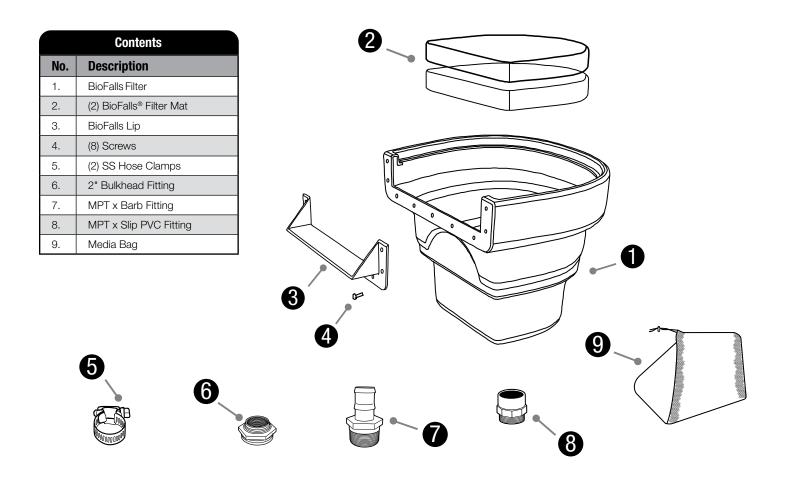
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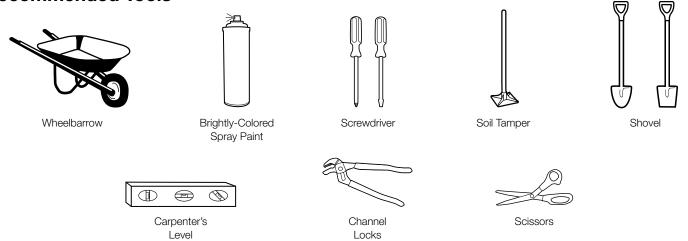




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## **Recommended Tools**



## **Helpful Symbols**



WARNING Symbol - Will alert you to the possibility of damage or injury if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electrical shock.



**TIP Symbol** – Helpful information provided by a professional pond installer.

#### Installation

## STEP 1

#### PLACE BIOFALLS FILTER

- If starting a new pond the BioFalls filter will be used to create your waterfall and should be positioned so it's facing a main viewing area.
- Make sure it is placed close to the edge of the basin so you can connect the pond liner to the BioFalls filter. You will need additional liner if creating a stream between the BioFalls and pond.
- If you are using the BioFalls filter on an existing pond, you will need an extra piece of liner approximately 4' x 6'. The extra liner should be long enough to attach to the BioFalls lip and have plenty left to hang over the side of the pond to prevent water loss.
- If you are using the BioFalls in conjuction with a skimmer.
   We recommend the BioFalls be placed directly across the length of the pond from the Skimmer to maximize water circulation (Ex. 1).



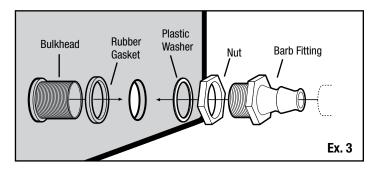
## STEP 2

#### HOOK UP AND LEVEL THE BIOFALLS

• Install the bulkhead fitting in the opening provided in the back of the BioFalls. The rubber gasket should be located on the inside of the BioFalls (Ex.1). Tighten the nut on the outside until the rubber gasket begins to bulge. This should only be approximately one turn past hand-tight. Be careful not to over tighten the nut, which could possibly crack the bulkhead. Please note that the bulkhead fitting is reverse threaded. Turn the nut counterclockwise to tighten (Ex. 2).



 Now install the barb fitting included with the kit into the bulkhead fitting. A PVC slip fitting has also been included in case you are using flexible PVC pipe. Use some silicone, sealant to coat the threads of the fitting, in order to help provide a watertight seal (Ex.3).



- Now it's time to position the BioFalls in the desired location.
- The BioFalls should be set at or slightly below the grade of the yard. Simply remove a section of sod or a few inches of soil in order to create a firm foundation for the BioFalls to sit.



**TIP:** Keep the waterfall to the scale of the yard! The goal should be to create the perception that Mother Nature herself has constructed the waterfall. Avoid creating a "volcanic look" by trying to raise the BioFalls too high in a flat backyard.

- Be sure to compact the area beneath the BioFalls box using a hand tamper or some other heavy flat object that can be pounded onto the soil. This will help prevent any future settling.
- Use a 2' bubble level in order to make sure your BioFalls is properly set into position. Your BioFalls should be level from side-to-side and tilt forward ¼ of a bubble on a 2' level (Ex. 4). This will make sure the water comes over the front of the BioFalls and covers the entire spillway.



 The filter is now ready for the kink-free pipe and hose clamp to be slipped onto the barb fitting. Have someone hold the BioFalls in place in order to prevent it from shifting out of level. In some instances the tubing/hose



may be tight and difficult to use with hose fitting barbs. If this is the case, we recommend heating the hose with the use of a hair dryer or simply dipping the hose for a few seconds in very hot water. Lubrication can also be used; we recommend silicone grease or vegetable oil. Once installed, the hose clamp can be tightened to secure the pipe on the fitting (Ex. 5).

 Double check to make sure the BioFalls is still level after installing the plumbing (Ex. 6).



 All of the soil removed from the excavation can be spread and compacted around the BioFalls, creating a berm. The filter should be completely surrounded by soil by the end of the project. Be sure to verify that the BioFalls remains level throughout the process.

**NOTE:** If installing into an existing pond. You may need to bring in extra dirt to backfill and create a berm around the BioFalls.

### STEP 3

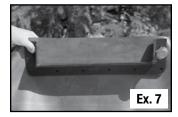
#### ATTACH LINER TO THE BIOFALLS



WARNING: Power tools are not recommended for installing the screws and may strip the nut inserts.

- Prior to installing the waterfall lip, make sure the face of the filter and liner is clean and free of dust and debris.
- Make sure there is at least 2 feet of liner on either side of the BioFalls.
- Have someone hold the liner against the BioFalls while you line up the waterfall lip over the liner. Make sure there are no wrinkles and the liner comes up above the sides of the BioFalls. Be sure that you have a few inches of slack liner along the front base of your BioFalls. This will help reduce

- tension on the waterfall lip when placing boulders in front of the unit (Ex. 7).
- Temporarily install the waterfall lip and liner to the BioFalls using the two outermost screws. Using an awl or nail, poke the first hole in the liner all the way through to the inside of the BioFalls (Ex. 7 & 8). Be careful not to damage the threads on the nut inserts when punching the holes with the awl. Remove the



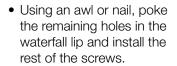


awl or nail while holding waterfall lip and liner in place and begin threading one of the screws into the filter (Ex. 8).

- Repeat this process for the other screw.
- Remove the waterfall lip from the BioFalls, keeping the screws installed through the waterfall lip and liner.
- Place a thick bead of silicone (not included) across the insert nuts on the front of the BioFalls (Ex. 9). Pre-installing the two screws in the earlier steps will make it easy to line up the waterfall lip after the silicone is applied and will keep the silicone in as thick of a bead as possible (Ex. 10).

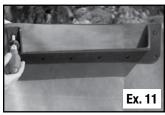


 Reattach the waterfall lip and liner using the two pre-installed screws (Ex. 11).



 Remove extra liner, using the waterfall lip as a guide. Install the rest of the screws (Ex. 12).







• Let dry for at least one hour before introducing water.

## STEP 4

#### INSTALLING THE FILTER PADS AND MEDIA BAG

- Install the two filter pads into the BioFalls.
- Add approximately 10 lbs of lava rock or Aquascape BioBalls™ (not included) into the media net. Set the media bag on top of the filter mats.



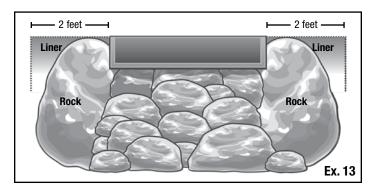
BioFalls Filter

- Biological Media net to hold BioBalls or Lava Rock sold separately
- Two standard biological filter mats
- Rock tray (not included) can hold rocks, plants, and gravel, helping to naturalize the filter into the surrounding landscape

## STEP 5

#### **BUILD THE WATERFALL**

 Place two larger boulders on either side of the waterfalls you are creating in order to "frame" the waterfalls. The water will be running between the two larger boulders you've set in place (Ex. 13).



- You can now begin to stack the rocks between the two larger boulders. These are the rocks that the water will be running over, so take your time and be creative. Start with the larger rocks on the bottom and work your way up to the smaller ones on top.
- Small stones and gravel can be used to fill in the gaps between the larger waterfalls stones (Ex. 14).



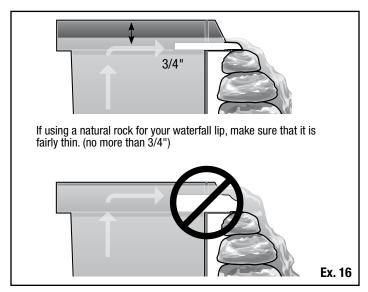
 Use the Pond and Waterfall Foam Sealant (not included) to fill in gaps between the stones that water is flowing over (Ex. 15). The foam keeps the water flowing over the top of the waterfall stones. Without the Pond and Waterfall Foam Sealant, you will lose waterflow as the water will travel and get lost beneath the rocks.



• Let dry for at least one hour before introducing water.



**TIP:** The BioFalls is designed with a plastic lip for the water to cascade off. You can use the plastic lip or hide the lip using a piece(s) of thin (no more than 3/4" thick) natural slate (Ex. 16). This stone can be attached to the BioFalls using Aquascape Black Waterfall Foam.



#### STEP 6

#### **BRING IN THE TOPSOIL**

 Add topsoil to the berm and surrounding area in order to provide a good substrate for future landscape planting.

## STEP 7

#### **BUILD THE RETAINING WALL**

• Finish off the berm where the BioFalls is buried by building a small retaining wall out of boulders (Ex. 17). This step may or may not be needed, depending on the size of the berm and the transition into the existing landscape.



## STEP 8

#### PLUG IN AND TWEAK THE WATERFALLS

 As soon as the pond is filled and all of the Pond and Waterfall Foam is dry, you may plug the pump in and test the waterfall.



WARNING: Any electrical should be plugged into a GFCI rated receptacle.

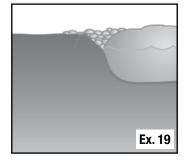
 You can tweak the waterfall flow by placing smaller stones and gravel on the waterfall cascades. This will change the appearance and sound of the water. Have fun playing with the flow of water coming over the falls until you achieve the desired effect.

## STEP 9

#### **TRIM THE LINER**

 With everything running, go around the perimeter of the pond with a pair of scissors and trim off any excess liner, always leaving several inches above the water level as a precaution (Ex. 18). The remaining liner edges can be covered with gravel (Ex. 19).







WARNING: Do not trim the liner until the waterfall is running and the pond is filled to the desired level. Prematurely trimming the liner may cause leaks.

## **STEP 10**

#### **MULCH THE BERM**

 The entire area surrounding the BioFalls can now be mulched and any surrounding plants added (Ex. 20).

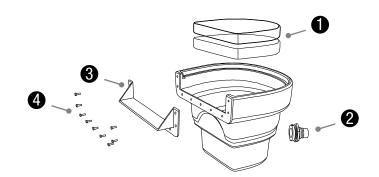


#### **General Maintenance**

- The BioFalls Filter is the starting point of your waterfall. The filter mats and filter media provide a home for the beneficial bacteria to live that help clean the pond and provide crystal clear water. BioFalls Filter is designed to require once-a-year cleaning when used in combination with a Signature Series™ Skimmer or Pondless® Waterfall Vault prefilter. These filters ensure that large debris is filtered from the water before it reaches the BioFalls Filter.
- DO NOT clean the filter mats or filter media bag in the BioFalls Filter more than once a year. Cleaning them, especially with chlorinated tap water, more than once-a-year will reduce or kill the beneficial bacteria growing on these filters. Replace old filter mats after several years when they begin to tear or fall apart.

## Replacement Parts

BioFalls Replacement Parts		
No.	Item number/description	
1.	99776 – Filter Mat	
2.	29103 – 2" Bulkhead Fitting	
3.	99791 – Filter Lip	
4.	30078 - Brass Screw Set (8 pk)	



**\$** 

## **Warranty Information**

LIFETIME WARRANTY

Aquascape warrants that the BioFalls 1000 Filter will be free of manufacturing defects for the lifetime of the product if properly installed and maintained. Proof of purchase required. Warranty does not cover damage resulting from negligent handling, misuse or lack of reasonable maintenance or care. If upon Aquascape's inspection, the Biofalls shows evidence of a manufacturing defect, Aquascape's liability is limited, at Aquascape's option, to the repair of the defect, replacement of the defective product, or refund of the original purchase price. The warranty excludes costs of labor, removal of product, shipping and expenses related to the installation and re-installation of the product. All products that include plumbing (tubing, pumps, check valves) need to be properly drained and winterized otherwise warranty is null and void. No liability for loss or damage of any nature or kind, whether arising out of or from the use of the product, whether defective or not defective, is assumed by Aquascape, Inc. or its affiliates. Aquascape shall not be liable for any incidental, consequential or other damages arising under any theory of law whatsoever. Aquascape warrants that the BioFalls 1000 Filter will be free of manufacturing defects for the lifetime of the product negligent handling, misuse or lack of reasonable maintenance or care. If upon Aguascape's inspection, the Biofalls shows evidence of a manufacturing defect, Aquascape's liability is limited, at Aquascape's option, to the repair of the defect, replacement of the defective product, or refund of the original purchase price. The warranty excludes costs of labor, removal of product, shipping and expenses related to the installation and re-installation of the product. All products that include plumbing (tubing, pumps, check valves) need to be properly drained and winterized otherwise warranty is null and void. No liability for loss or damage of any nature or kind, whether arising out of or from the use of the product, whether defective or not defective, is assumed by Aquascape, Inc. or its affiliates. Aquascape shall not be

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