INSTRUCTIONS & MAINTENANCE



PONDLESS® WATERFALL VAULT

Pondless[®] Waterfall Vault Item #49000

Pondless[®] Waterfall Vault Extension Item #49001



Optional Pondless[®] Waterfall Vault Extension

Pondless® Waterfall Vault



aquascapeinc.com

PROFESSIONAL GRADE



Thank you for choosing the Aquascape Pondless® Waterfall Vault. 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.



Pondless[®] Waterfall Vault

The Aquascape Pondless[®] Waterfall Vault is the ideal pump vault for use in Pondless[®] Waterfalls, rainwater harvesting systems, and large fountainscapes. The vault effectively protects pumps from damage and makes it easy to access the pump for quick and easy maintenance. Its durable, polyethylene construction ensures year after year of reliable use. An optional Pondless[®] Waterfall Vault Extension can be used when creating deeper basins. This instruction manual will guide you through the proper installation of your filter as well as recommended maintenance procedures to ensure long-term effectiveness.

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Contact Us

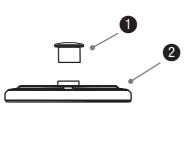
For more information about our company or products, please visit our website at aquascapeinc.com or call US (866) 877-6637 CAN (866) 766-3426.

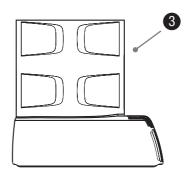
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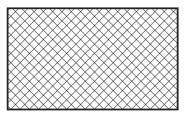
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	Contents
No.	Description
1.	Vault Inspection Cap
2.	Vault Lid
3.	Vault





Recommended Products



AquaBlox[®] Small Water Storage Modules (#29491) OR

AquaBlox® Large Water Storage Modules (#29492)



45 Mil EPDM Liner



Non-Woven Geotextile Underlayment

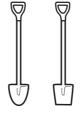
Recommended Tools



Brightly Colored Spray Paint



Soil Tamper



Shovels

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Carpenter's Level

Instructions

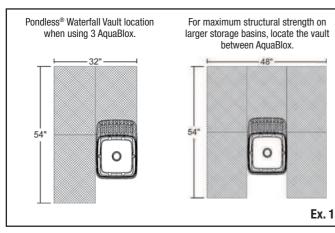
STEP 1

EXCAVATE BASIN

- It is recommended to lay out the position of the Pondless Waterfall Vault and AquaBlox prior to excavation to determine actual excavation dimensions.
- Using a can of brightly colored spray paint, trace around the vault and AquaBlox to outline the area that is to be excavated.
- Using the traced area as a guide, dig the hole.

NOTE: An additional 6" of excavation is recommended per side of the basin to allow for AquaBlox dimensions, sufficient backfill material, and compaction required during backfilling.

• See Ex. 1, 2, and 3 for examples of Pondless Waterfall storage basin configurations. Larger storage basins can be constructed by increasing the quantity of AquaBlox Small Water Storage Modules and/or using the optional Pondless Waterfall Vault Extension in combination with the AquaBlox Large Water Storage Modules. Liner and geotextile dimensions will vary according to the quantity and size of AquaBlox used.



• The optional Pondless Waterfall Vault Extension (#49001) slides onto the top of the Pondless Waterfall Vault, increasing the height for deeper basins using the AquaBlox Large. The extension slides on from the front of the unit towards the back (Ex. 2).



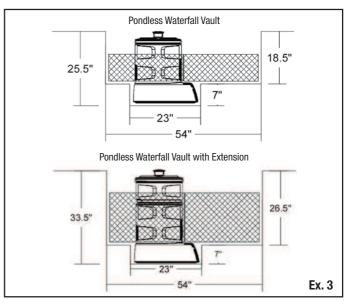
NOTE: Check for presence

of high water table in the excavation, which must be a minimum of 3 feet below the bottom of the AquaBlox structure at all times.

STEP 2

EXCAVATE LOCATION OF PONDLESS WATERFALL VAULT

• Excavate a recessed area for the Pondless Waterfall Vault. This positions the vault at the lowest point in the storage basin, allowing maximum water availability for the pump system (Ex. 3).

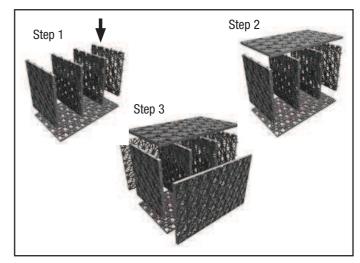


STEP 3

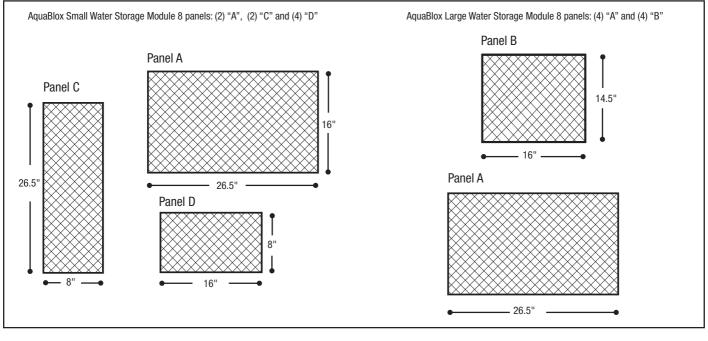
ASSEMBLE AQUABLOX WATER STORAGE MODULES

- Step 1: Evenly distribute and connect the small panels to one large panel.
- Step 2: Next, working from one end to the other, attach a second large panel on the opposite side of the first.
- Step 3: Once the top and bottom large panels are attached, attach the sides of the tank module. This is a "single" AquaBlox.

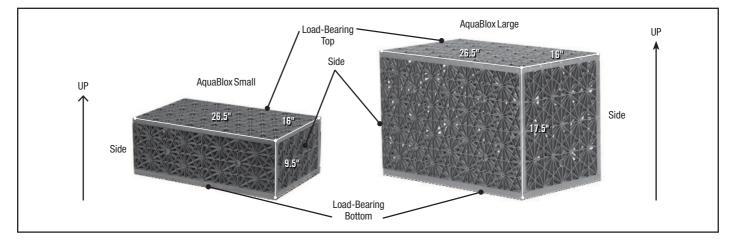
SINGLE MODULE ASSEMBLY



AQUABLOX COMPONENTS



NOTE: Be sure to check all pieces upon arrival for any damages that may have occurred during shipping.



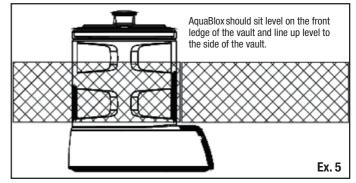
STEP 4

PREPARE BASE

- Use a soil tamper to ensure the base of the excavation is smooth soil, flat, and free of lumps and debris (Ex. 4).
- Check the size and depth of the excavation by placing the Pondless Waterfall Vault and AquaBlox into the excavated area. The AquaBlox should sit level on the front ledge of the Pondless Waterfall Vault,



as well as line up level to the side of the vault (Ex. 5). There should be approximately 6" between the AquaBlox and the soil.



• If existing soil conditions do not meet requirements listed above, add compactible material such as sand. The compactible material should be spread to a 4" minimum depth and compacted.

STEP 5

INSTALL GEOTEXTILE AND LINER

 Install Outer Geotextile – Lay the geotextile into the excavation, covering the bottom and sides (Ex. 6). Multiple sections of geotextile can be overlapped to accomplish complete coverage.



 Install Liner – Lay the liner into the excavation and position to cover entire storage basin (Ex. 7). Do not trim the excess liner material until later in the project.



 Optional Inner Geotextile – An optional second layer of geotextile may be used within the lined storage basin. The second layer is wrapped around the bottom and sides of the AquaBlox, helping further protect the liner from the edges of the AquaBlox. The secondary inner layer of geotextile is especially useful protection on bigger storage basins that contain a larger quantity of AquaBlox.

STEP 6

INSTALL PONDLESS WATERFALL VAULT

• Place the Pondless Waterfall Vault into its proper location (Ex. 8).



STEP 7

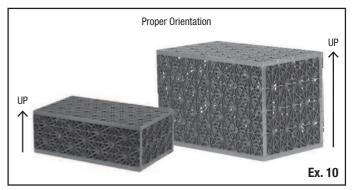
INSTALL AQUABLOX

• Install AquaBlox in the storage basin, butting them tightly against each other (Ex. 9). After placement of the AquaBlox, bring the optional inner geotextile (if using) up the sides of the tanks.



AQUABLOX ORIENTATION

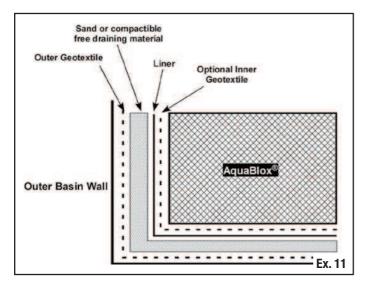
• The AquaBlox must be installed with the correct orientation to ensure maximum load bearing capacity (Ex. 10).



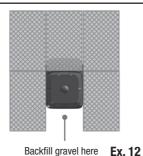
STEP 8

BACKFILL SIDES

• The excess excavation along the outside perimeter of the storage basin can be backfilled once all of the AquaBlox are installed. Use sand or compactible, free draining material to backfill evenly on all sides, securing the AquaBlox into position (Ex. 11).



• When the Pondless Waterfall Vault is located between two AquaBlox there will be a void space behind the vault that will require backfilling. Use 1.5" or larger gravel inside the liner, behind the Pondless Waterfall Vault to fill the void space (Ex. 12).



STEP 9

INSTALL PUMP AND PLUMBING

• The Pondless Waterfall Vault and extension includes one 3" hole to run the plumbing from the pump to the start of the waterfall. Flexible PVC pipe can be inserted through the hole in the side of the Pondless Waterfall Vault and connected to a check valve or plumbing assembly (Ex. 13).



• Additional plumbing holes can be drilled through the Pondless Waterfall Vault if needed. A second drill point is located on the opposite side of the Pondless Waterfall Vault and extension for accuracy when drilling an additional plumbing hole.

NOTE: Larger pumps using 3" plumbing will require the use of the Pondless Waterfall Vault Extension and AquaBlox Large Storage Modules.

- Flexible PVC pipe can withstand extreme weather conditions, so it is unnecessary to dig a deep trench. The pipe can transition over the edge of the basin and be covered with boulders and backfilled with soil (Ex. 14).
- To prevent damage to the pipe in winter conditions,

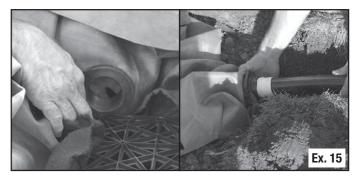


slope the pipe down from the top of the waterfall to the Pondless Waterfall storage basin. This will help to drain as much water from the line as possible if the pump is removed for winter storage.

STEP 10

INSTALL OPTIONAL OVERFLOW

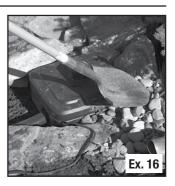
• An optional overflow can be installed using the Overflow Kit (#30209), managing excess water entering the basin (Ex. 15). Installing an overflow system is recommended on Pondless Waterfalls that will be receiving captured rainwater (Rainwater Harvesting Systems). Please contact Aquascape's Customer Care Department for more information.



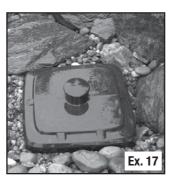
STEP 11

BACKFILL TOP AND FINISH EDGES

• The AquaBlox can be covered with a layer of 1.5" or larger decorative gravel (Ex. 16).



- Boulders can be placed around the perimeter of the water storage basin to complete the edges of the basin (Ex. 17).
- The liner edges can be trimmed to at least 3" above the maximum water level in the basin and backfilled behind the boulders.
- The built-in water level inspection port allows you to check the water level with the lid buried (Ex. 18).
- Permeable paver applications installed on top of the water storage basin require woven geotextile (#30219). The geotextile is laid directly on top of the exposed AquaBlox. This will provide a base for the paver screening to be spread.





NOTE: Do not use the inner and outer non-woven geotextile (underlayment) on top of the AguaBlox as it will potentially clog.

Warranty Information

STEP 12

BUILD WATERFALL AND STREAM

 The Waterfall Spillway (#77000) is an excellent product to help you create beautiful waterfalls and streams (Ex. 19). For more information on installing the Waterfall



Spillway, please consult the Waterfall Spillway Installation Instructions. For information on waterfall and stream design and installation, please visit our website at aquascapeinc.com.

LIFETIME WARRANTY

Aquascape warrants that the Pondless® Waterfall Vault 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 Aguascape's inspection, the Pondless® Waterfall Vault 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 Aguascape, Inc. or its affiliates. Aquascape shall not be liable for any incidental, consequential or other damages arising under any theory of law whatsoever.

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