





INSTALLATION GUIDE



-  **Polaris PowerFall**
-  **Polaris Metal Power Falls**
-  **Polaris Power Streams**
-  **Polaris Fiber Fall**

IMPORTANT INFORMATION

SERIAL NUMBER

Important Information

- **To avoid warping, keep unit out of direct sunlight.**
- Keep nozzle protector in lip opening of falls until pool construction is complete.
- Nozzle spacers are welded 1" from the front of the nozzle lip, 4" apart. Do not remove spacers as they maintain the consistency of the waterfall.
- At startup, do not divert water to the falls until plumbing lines run clear.
- For best results with **FiberFall**, keep fiber cable length to less than 15 feet from the illuminator. Allow for two (2) extra feet of cable in case it must be cut and re-set.
- Use an in-line filter with **PowerStreams** to ensure free water flow through smaller outlet holes.

For customer service or support:

- Please return Warranty Card immediately.
- For online support: www.polarispool.com
- To contact Polaris:

US and Canada

Customer Service
2620 Commerce Way
Vista, CA 92081-8438
1-800-822-7933

Specifications

PowerFall®

Dimensions: 2-5/8" W x 3-1/8" H
Unit Lengths: 12", 18", 24", 36", 48" and 60" with one 1-1/2" inlet. 72", 84" and 96" with one 2" inlet.
Nozzle Lengths: Standard 1", Extended 6", 9" and 12". Custom and radius cuts available.

MetalPowerFalls® (Stainless Steel, Brass and Copper)

Dimensions: 2-5/8" W x 3-1/8" H
Unit Lengths: 12", 18", 24" with one 1-1/2" threaded inlet. 36" and 48" with two 1-1/2" threaded inlets.
Nozzle Lengths: Standard 1" only.

PowerStreams™

Dimensions: 2-5/8" W x 3-1/8" H
Unit Lengths: 12", 18", 24", 36", 48", and 60" with one 1-1/2" inlet. 72", 84" and 96" with one 2" inlet.
Nozzle Lengths: Standard 1", Extended 6" and 9", Super-extended 12". Custom and radius cuts available.

FiberFall®

Dimensions: 2-5/8" W x 3-1/8" H
Unit Lengths: 12", 18", 24", 36", 48" and 60" with one 1-1/2" inlet. 72" with one 2" inlet.
Nozzle Lengths: Standard 1", Extended 3" and 6". Radius cuts available for 6" at factory.
Lamp: Polaris AfterDark® light driver recommended.
Optic Colors: Nine colors (including white), rotating or fixed.
Fiber Cables: Single 150-strand equivalent cable on 12", 18", and 24"; standard 1" nozzle units. Left connection.
Two 150-strand equivalent cables on 36" and 48"; standard 1" nozzle units. 2-sided connection.
Two 225-strand equivalent cables on 60" and 72"; standard 1" nozzle units. 2-sided connection.
Single 225-strand equivalent cable on 12", 18" and 24"; 3" and 6" nozzle units. Left connection.
Two 225-strand equivalent cables on 36", 48", 60" and 72"; 3" and 6" nozzle units. 2-sided connection.

Introduction

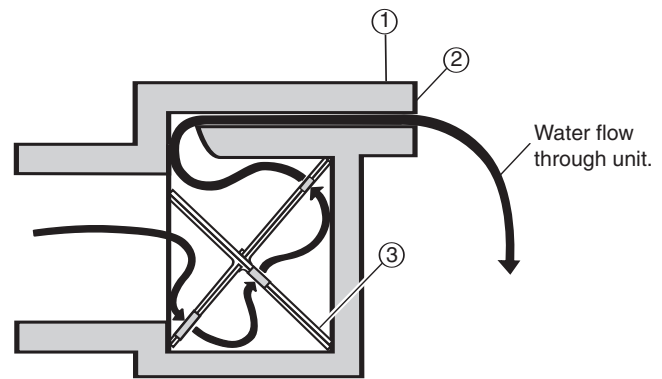
The Polaris PowerFall, MetalPowerFalls, PowerStreams and FiberFall are designed for easy installation and years of dependable service. Their patented X-Baffle® reinforcement provides superior durability and consistent, even water flow.

All Polaris waterfalls produce the naturally soothing sight and sound of a beautiful waterfall. PowerStreams separates the water sheet into individual streams of water, adding a sparkling effect and reducing flow requirements. FiberFall uses fiber optics technology to softly light the nozzle area of the waterfalls.

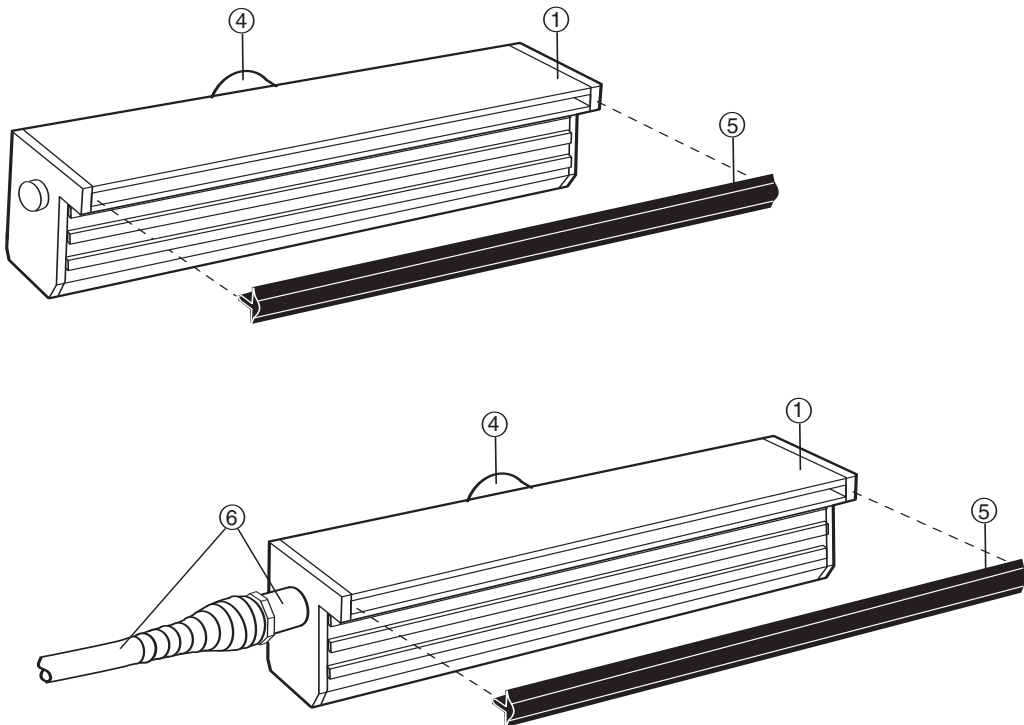
Please read and follow installation instructions carefully. Failure to follow recommended installation methods could void warranties and cause injury.

Components

1. Nozzle
2. Lip
3. X-Baffle
4. Inlet
5. Nozzle Protector
6. Lens Chamber with Fiber Cable (FiberFall Only)



Side Cutaway View



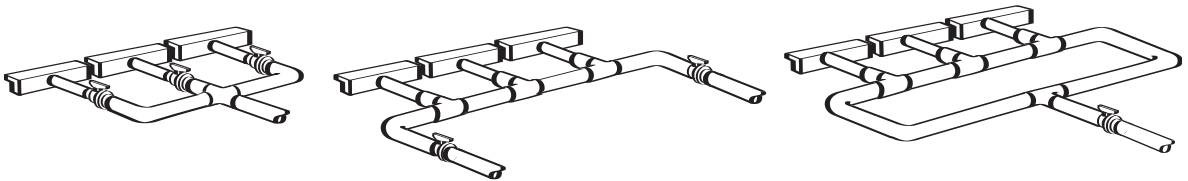
Installation

1

Plumbing the Waterfall

Proper, unrestricted flow is essential to optimize Polaris waterfall performance. Ensure that these general plumbing guidelines are followed.

- Optimum flow rate is 1 Gallon Per Minute Per Inch (GPM/IN). Minimum is 0.5 GPM/IN.
- If the waterfall flow requirement exceeds 40% of the output of the circulation pump, a separate pump and dedicated plumbing lines must be used for the waterfall.
- Use 1-1/2" pipe for units up to 60" in length and 2" pipe for units exceeding 60".
- Use an in-line filter with **PowerStreams** to maintain free water flow through outlet holes.
- Two or more lines plumbed to the same water feature should be the same length.
- Units in excess of 36" length require dedicated plumbing lines.
- Valve each unit separately or, if units are the same size and set at the same elevation, plumb a loop to equalize water flow to all units.



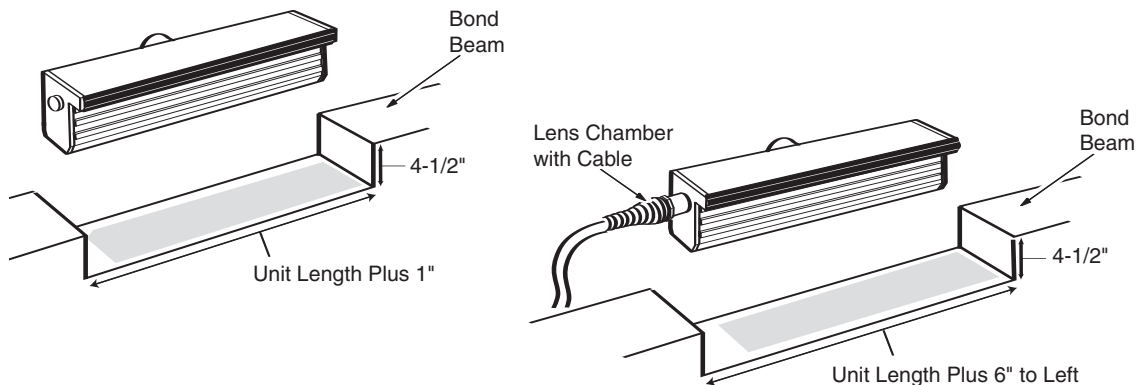
- Plumbing line(s) to waterfall should be run at grade to properly support inlet piping.
- Pressure test plumbing line(s) to waterfall.

2

Preparing Niche for Waterfall

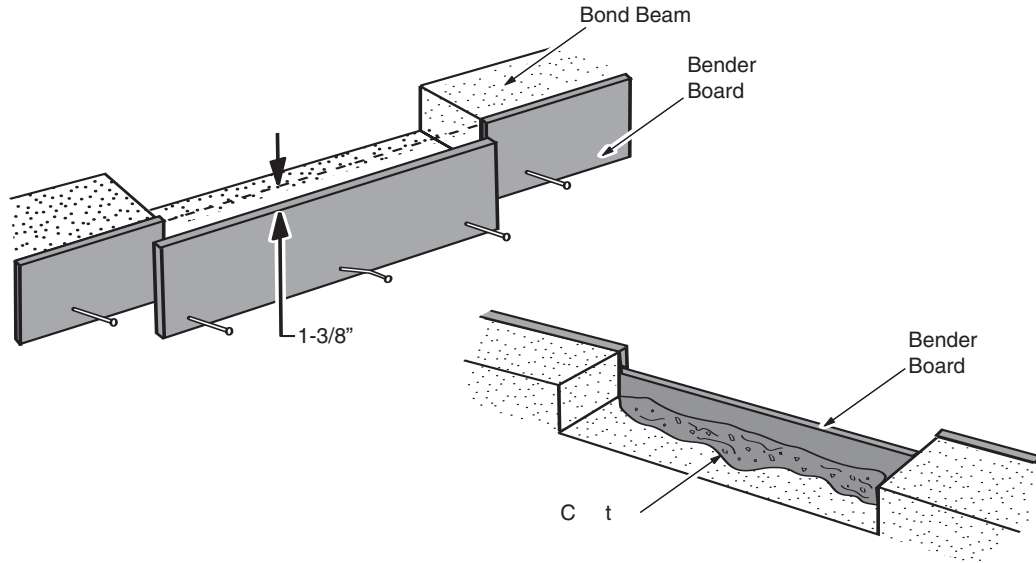
For PowerFall, MetalPowerFalls and PowerStreams, notch the bond beam 4-1/2" deep and 1" longer than the width of the unit. For FiberFall, notch for unit length plus 6" on the left to accommodate the lens chamber and fiber cable, or 6" on both sides for double-chambered units. FiberFall also requires a 1" conduit stub-up in the beam for the fiber cable(s).

For vinyl pools, configure block to match gunite beam installation.



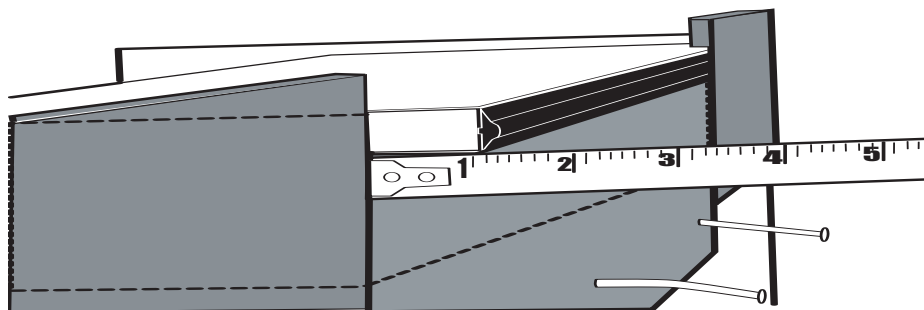
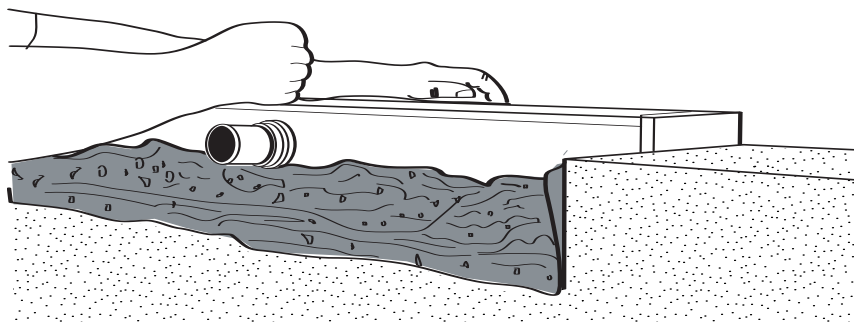
After notching the beam (setting blocks):

1. Determine water level with bender board.
2. Tack bender board at niche $1\text{-}3/8"$ below bottom of coping.
3. Cement back of board.



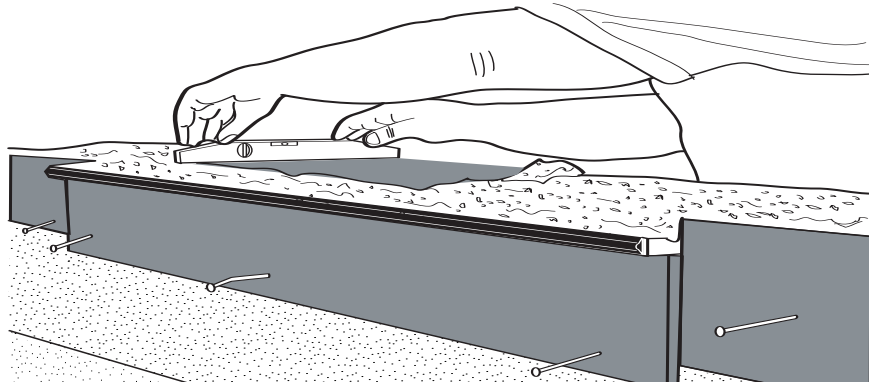
3 Setting the Waterfall

Create a bed of cement mortar in the niche to provide a solid base for the waterfall. Set the unit into the mortar bed. The nozzle should extend 1" beyond gunite (or more for thicker finishes like rock or brick) to **ensure nozzle lip will be 1/4" past finished pool wall**. Tap in and level.



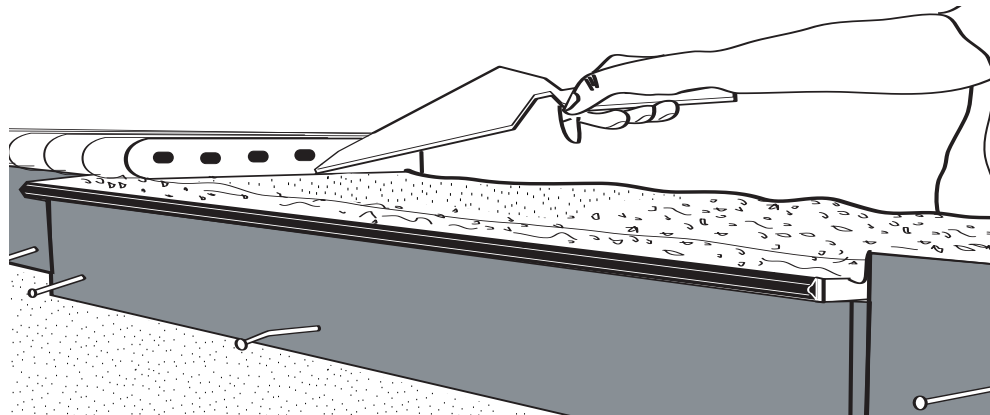
Shield unit from sun until a finish topping has been applied.

Apply 5/8" of cement finishing to top, sides and back of waterfall to encase unit. Slope top surface slightly towards back, 1/4 bubble on level. Remove excess cement from front of falls.



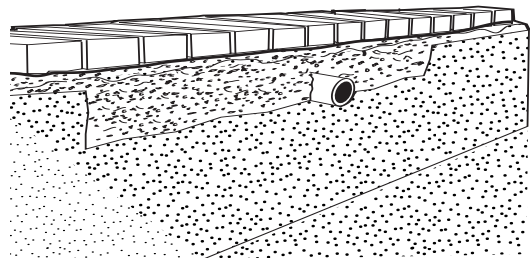
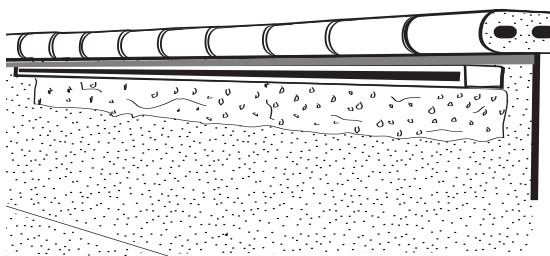
4 Finishing the Waterfall

Use thin-set to install coping material onto cement on top of waterfall. Tap in and level. Remove bender board.



Completed Installation - Front

Completed Installation - Back



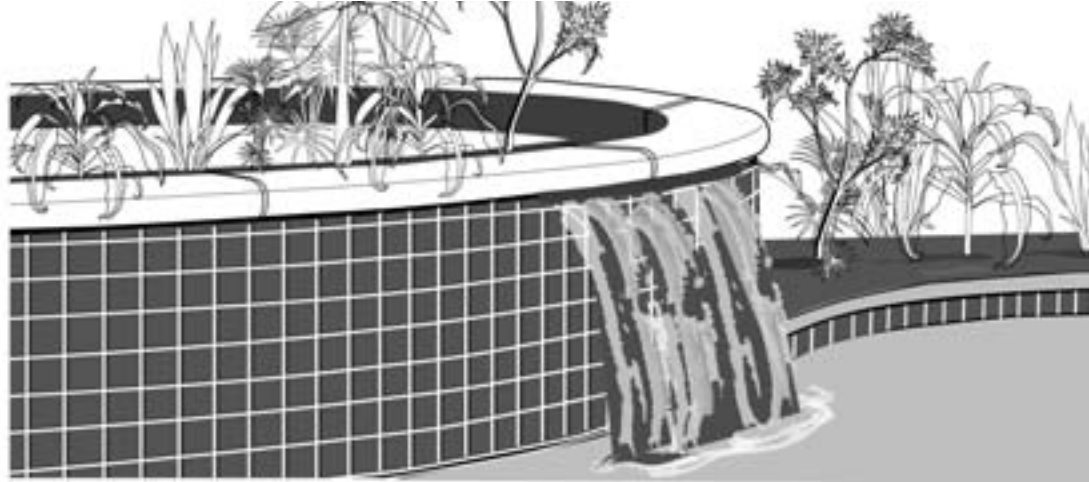
After system inspection, use appropriate fitting(s) to connect the waterfall inlet(s) to the plumbing lines. Do not apply torque to the inlet fittings.

- For 12"- 60" units use 1-1/2" coupling or 90-degree elbow.
- For 72"- 96" units use 2" coupling or 90-degree elbow.

Startup of Waterfall

When the pool is completely clean and plumbing lines are clear, remove the nozzle protector from the waterfall. Clear away any small debris lodged in the lip of the nozzle.

Open the valve to divert water to the waterfall. Run until all air clears the line and a smooth water sheet is projected.



Polaris PowerFall, Metal PowerFalls, PowerStreams and FiberFall Limited Warranty

This limited warranty is extended to the original consumer purchaser of the Polaris PowerFall®, Metal PowerFalls®, PowerStreams® or FiberFall® manufactured by Polaris Pool Systems, Inc., 2620 Commerce Way, Vista, CA 92083-8438, USA.

Polaris warrants this product, including all parts and components thereof, to be free of defects in material and workmanship for a period of one year from date of purchase by the original purchaser. The limited warranty does not apply if the failure is caused or contributed to by any of the following: improper handling, improper storage, abuse, improper installation, use in an unsuitable application, lack of reasonable and necessary maintenance, or repairs made or attempted by someone other than an authorized service center or technician. Polaris will repair or replace, at its option, a unit proved to be defective within the warranty period and under the conditions of this warranty.

Polaris is not responsible for the cost of removal of the unit, damages due to removal or installation, shipping charges to or from the factory, or the installation of a repaired or replacement unit.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES ARE DISCLAIMED EXCEPT TO THE EXTENT ANY IMPLIED WARRANTY MAY BE IMPOSED BY STATE CONSUMER LAW. ANY SUCH IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW IS LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE. IN NO EVENT SHALL POLARIS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE OR KIND OR FOR DAMAGES TO PERSONS OR PROPERTY, INCLUDING ANY DAMAGE RESULTING FROM THE USE OF THIS POLARIS PRODUCT. THE ONLY REMEDY PROVIDED TO YOU UNDER AN APPLICABLE IMPLIED WARRANTY AND THE LIMITED WARRANTY SET FORTH ABOVE SHALL BE THE REMEDIES EXPRESSLY PROVIDED FOR UNDER THIS LIMITED WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

This one year limited warranty is valid only in the United States of America, Canada and Australia. Polaris PowerFall®, Metal PowerFalls®, PowerStreams® or FiberFall® sold in the United Kingdom, France, Germany, Italy, Portugal or Spain are warranted for a period of two years from date of purchase.