



RIVERFLOW PUMP INSTALLATION GUIDE

PLUMBING INSTALLATION OVERVIEW

Riverflow Plumbing notes

Review the following plumbing installation overview prior to installing the Riverflow™ system.

- All elevation measurements should be referenced from the pool's normal water line.
- We recommend that ALL Riverflow components, pipe and fittings be present at the job site before plumbing begins. Complete plumbing layout prior to poured concrete, Gunitite or Shotcrete to verify angles and elevations.
- Large diameter PVC fittings vary in size and dimension. Measure fittings for actual dimensions.
- Use only primer and solvent cement rated for 10-in. diameter or larger PVC pipe. (IPS Weldon 717)
- To insure sound glue joints, all pipe ends should be beveled and fully seated in fittings.
- The top of the Trueflow return fitting should be 5-in. below water line. A level run from that point to the pump discharge outlet is recommended.
- The Riverflow suction run(s) are normally level from pool to pump. However, Riverflow suction fittings can be installed up to a minimum of 12-in. below water line.
- Keep all plumbing runs from pump to pool as straight as possible. Always use 45° elbow(s) rather than 90° elbow when possible. If the return run exceeds three 45° elbows, contact Riverflow support at Current Systems Inc. PST (866) 372-8886 or EST (888) 443-4113.
- All trenching and excavations must be backfilled and compacted to meet industry standards to support the Riverflow pump, fittings and pipe.
- Upon completion of plumbing and prior to motor installation, a 24"x 24" x 3" concrete stabilizing collar should be poured around the pump housing, leaving 1-in. clearance below the pump headnuts. Keep dirt, standing water, and shrubs off the pump head.

NOTE: All wall penetrations edges should be back-cut while cement is wet. Dry pack with hydraulic cement or similar industry approved material before the application of finish plaster.

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PLUMBING INSTALLATION SUCTION & RETURN FIXTURES

Suction Box Installation

Riverflow suction assemblies are designed for installation in vertical walls of poured concrete, Gunite or Shotcrete swimming pools. Always cover the finish edge of the box and the grate to protect the parts from damage and overspray during installation.

The top of the suction box should be 12-in. or more below water line and separated by at least 12-in. (3-ft. on center)

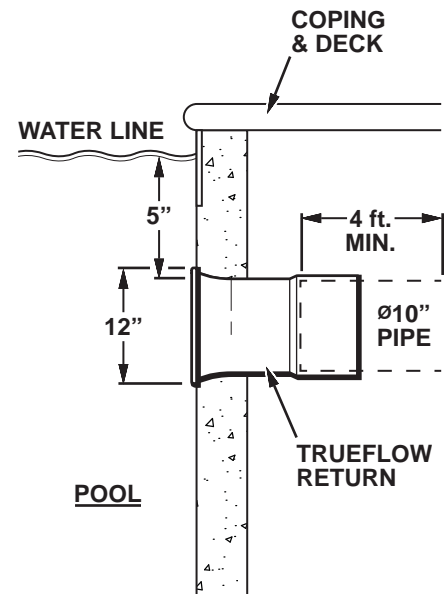
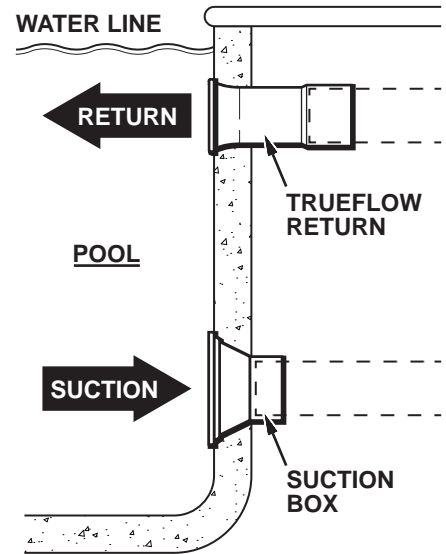
The boxes are designed to finish flush with the interior surface of the pool wall. Suction grates are secured to the suction box with factory installed stainless steel fasteners. If these grates are removed they must be replaced using all of the original fasteners.

Trueflow Return Installation

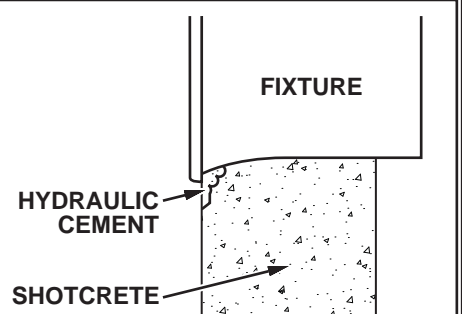
The Trueflow return fitting is designed for installation in a vertical wall of a poured concrete, Gunite, or Shotcrete swimming pool. Always cover the Trueflow assembly for protection from damage or overspray during installation. The top of the Trueflow opening should be 5-in. below water level.

The Trueflow should be supplied by at least 4-ft. of straight 10-in. pipe after any bends.

The Trueflow assembly should be 'aimed' carefully along the length of the swimming pool to ensure a balanced current. The internal vanes may be inserted in the Trueflow before gunite. Prior to filling the pool the vanes should be set in place with silicone or epoxy.



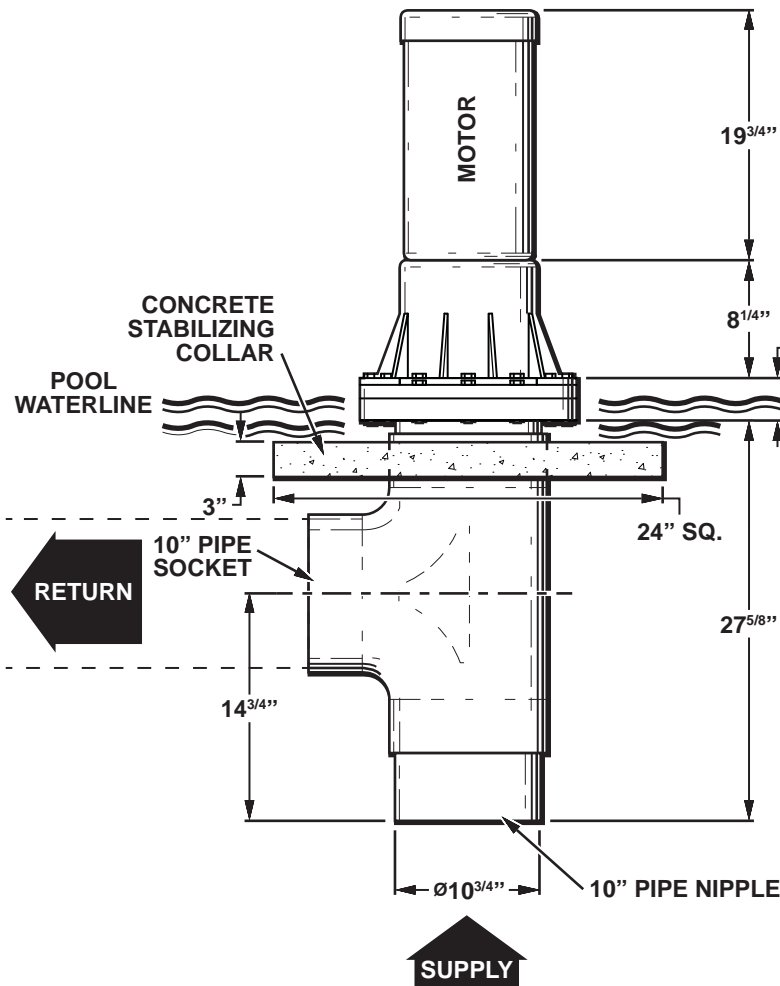
NOTE: During shotcrete, perimeter edges of wall fittings must be scooped out to accommodate dry pack with hydraulic cement.



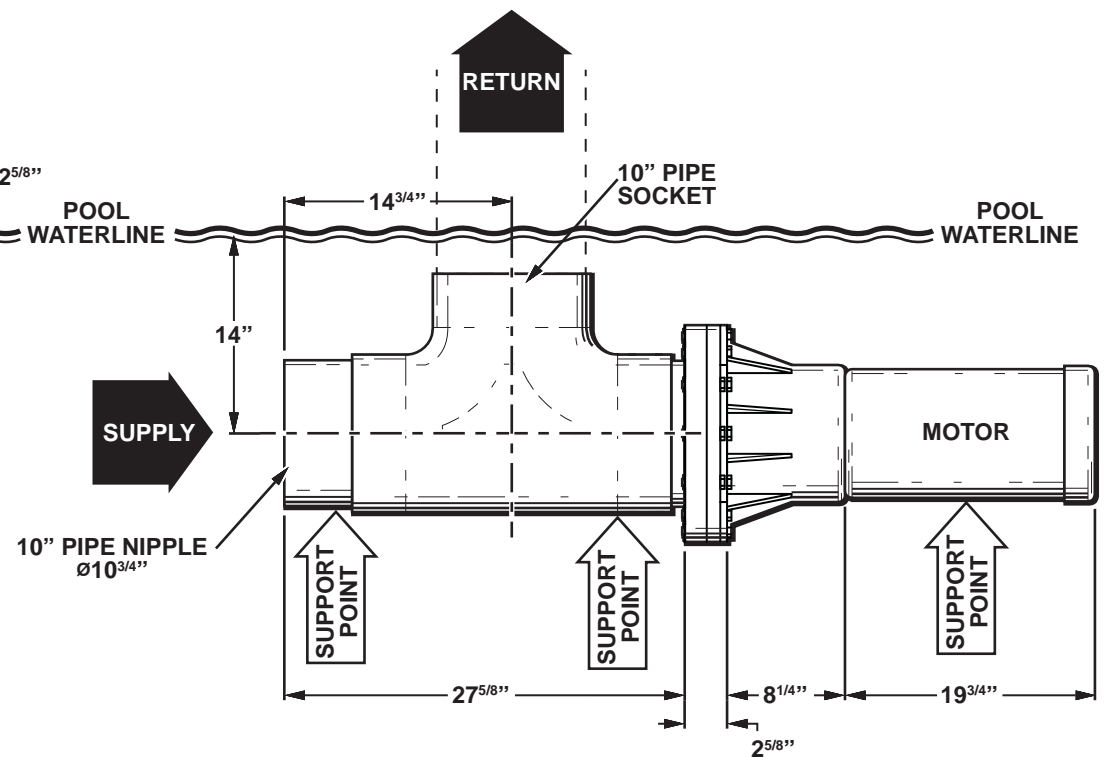


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PLUMBING INSTALLATION PUMP DETAIL



VERTICAL PUMP INSTALLATION



HORIZONTAL PUMP INSTALLATION

Current Systems, Inc.
West Coast Toll Free: (866) 372-8886
East Coast Toll Free: (888) 443-4113

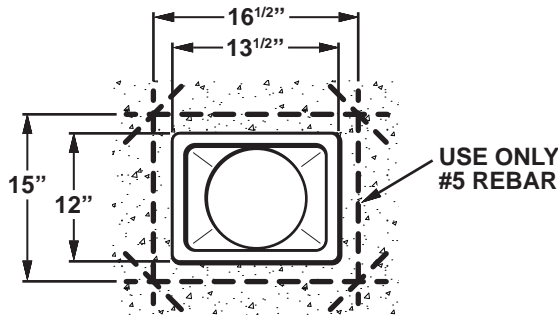
www.riverflowpumps.com



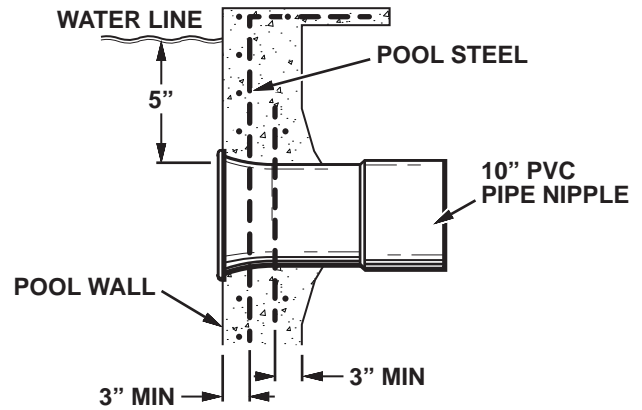
VGB 2008a Complete System Certified

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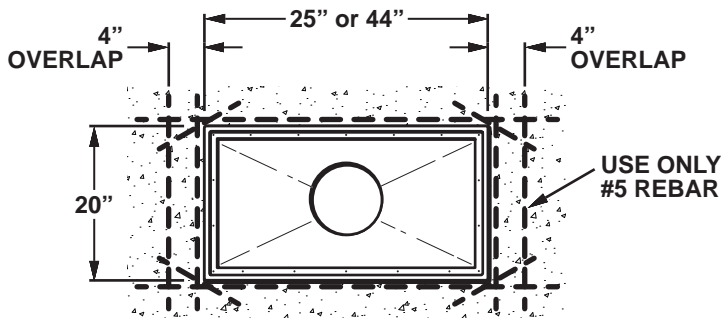
PLUMBING INSTALLATION EXAMPLE STEEL SCHEDULE



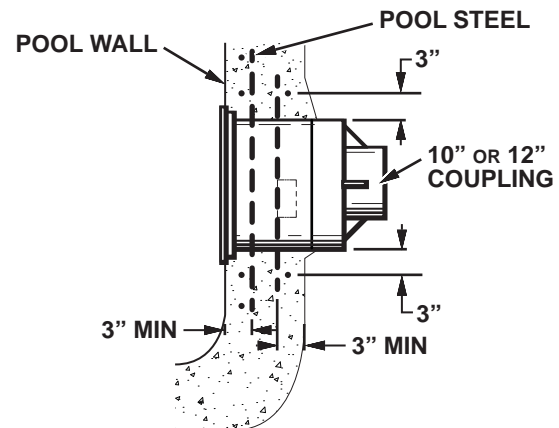
DIFFUSER RETURN FRONT VIEW



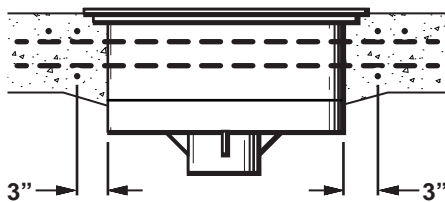
DIFFUSER RETURN BOX SIDE VIEW



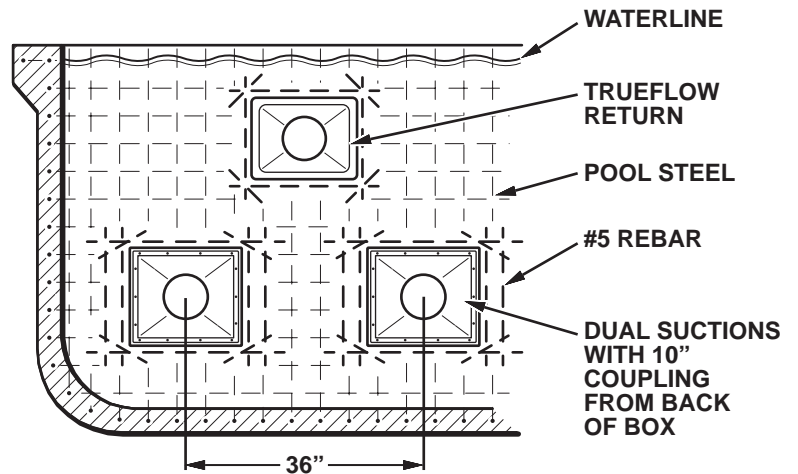
SUCTION BOX FRONT VIEW



SUCTION BOX SIDE VIEW



SUCTION BOX TOP VIEW



SECTION VIEW OF POOL WALL INSTALLATION

NOTE: This is an example steel schedule. Verify with structural engineer prior to installation of Riverflow system.