

# A&A CHANNEL WALL DRAIN (As Side-Wall Suction) Installation Instructions

## Note to the Plumber:

With the A&A Channel Drain (a submerged fitting) it is necessary to run **only** one suction line, per pump, to the wall of the pool. (Because the Channel Drain is an un-blockable fitting, no other fitting is necessary.) The Channel Drain **must be installed vertically** in the wall and **instead** of installing a CAP on the line that extends through the pool wall, for pressure testing, **the Channel Drain must be installed**. The Channel Drain is already plugged and ready for pressure testing once it is installed. The maximum flow rate of the Channel Drain, certified by the NSF, is 184 GPM (dual-suction) & 167 GPM (single suction). **Maximum flow rate is not to be exceeded!**

**NEVER INSTALL THE CHANNEL DRAIN IN A SEAT OR A BACKREST AREA!**

1. The side wall Channel Drain should be located in the wall near the deepest part of the pool and mid-way down that wall. Since the Channel Drain is 32 inches long, the 90° Ell that feeds the drain must be at least 18 inches above the top of any cove (see Figure 1)
2. Dig a niche down the wall of the pool at the desired location of the Channel Drain. The niche must be at least 12 inches wide and the back of the niche must be 12 inches to 14 inches from the final finish surface of the pool (see Figure 1).
3. To determine the correct depth of the niche, drop a plumb line 12" from the front of the bond beam form. This line will represent the gunite of shotcrete wall surface. (See Figure 1 that illustrates a plumb line tied to a rebar bent and extending over the bond beam form.)
4. It is recommended, that when plumbing the suction line down through the niche, you use 3" Schedule 40 PVC pipe. Use a level to assure that the vertical pipe is plumb both front and side. Certified flow rates are based on 3" plumbing only.
5. To determine how far the Channel Drain is to be set in relation to the distance from the excavated wall, measure from the 90° Ell to the plumb line. That distance, minus the 8" depth of the Channel Drain will give the nipple length between the 90° Ell and the fitting on the bottom of the Channel Drain. Add to that the depth of the slip fittings in the Ell and the Channel Drain Fitting.
6. When the Channel Drain is installed properly, the plumb line will pass along the flat water stop flange on the Channel Drain (see Figure 2). **SUGGESTION:** The parts should be "dry fitted" before gluing to assure that the proper positioning of the Channel Drain is achieved. (a.) The Channel Drain finishes along the plumb line assuring that it is at the proper depth (b.) The Channel Drain finishes level vertically and horizontally.

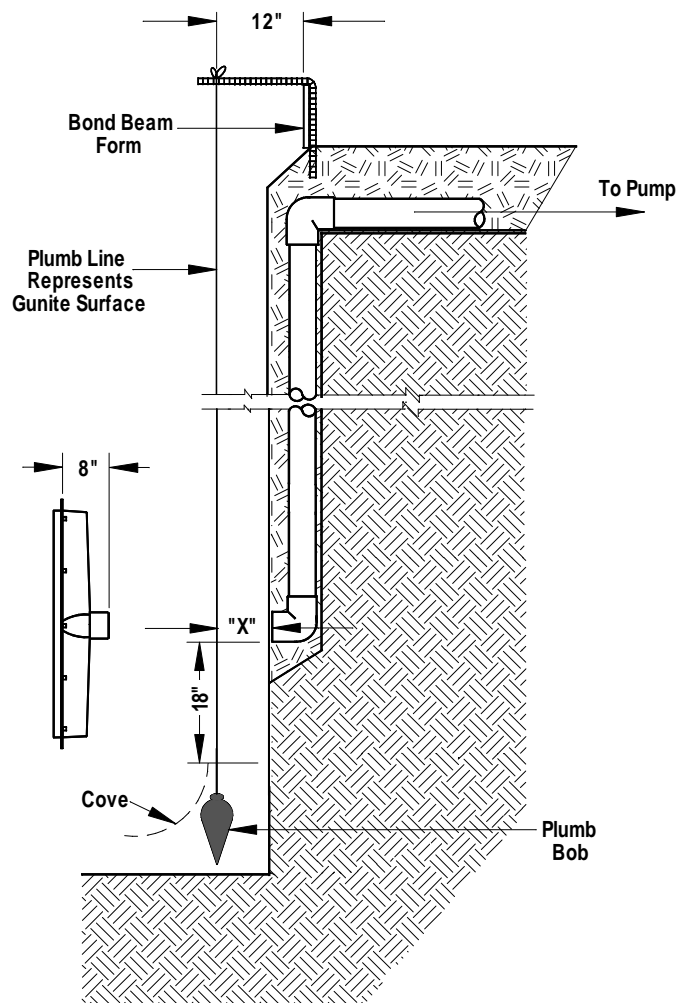
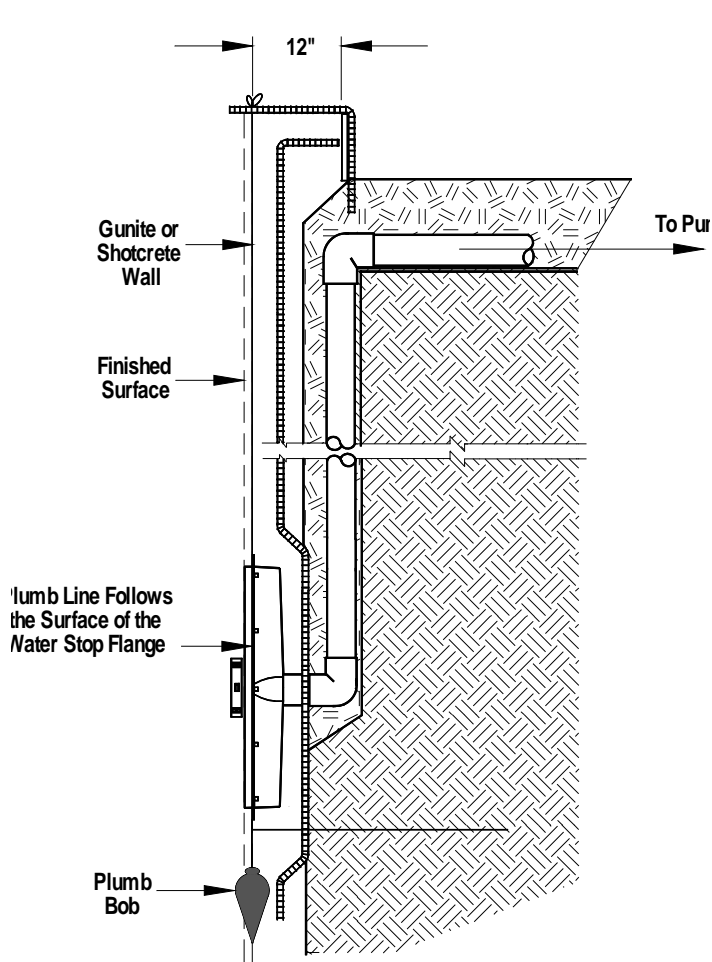


Figure 1

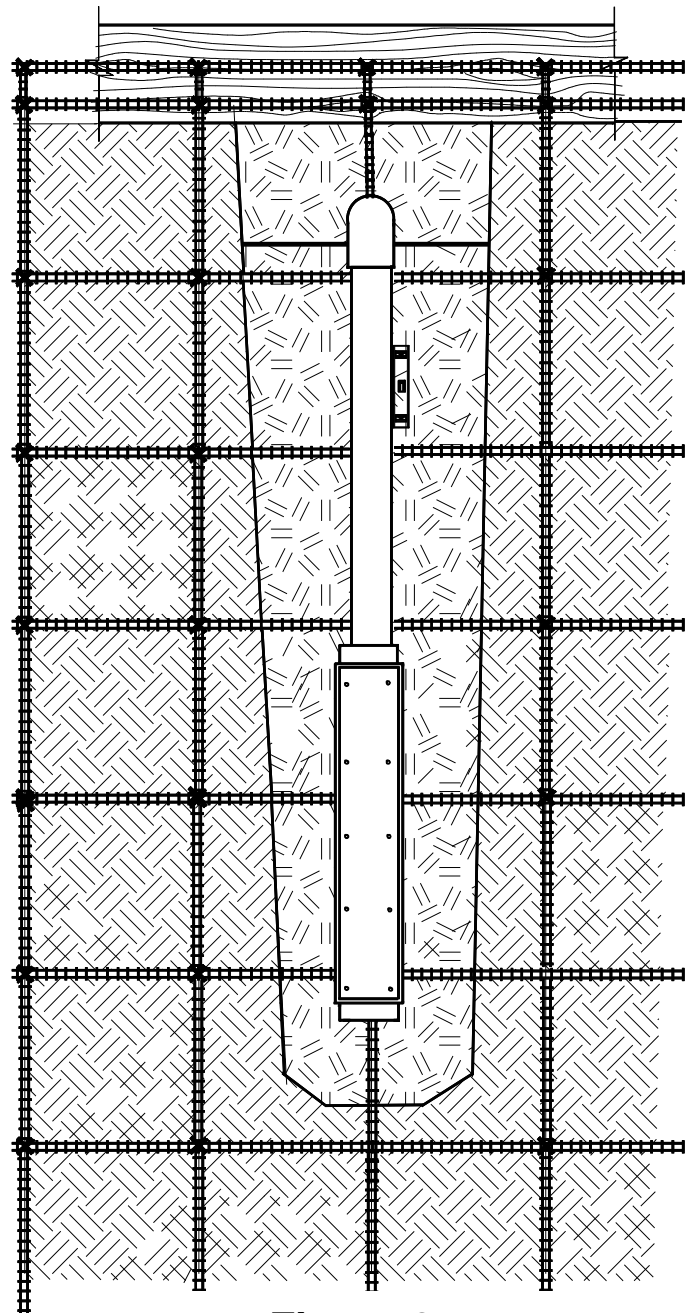
- When it is determined that all the parts are the proper length and the Channel Drain will finish in the proper position, glue the parts in place. (**NOTE: Use ABS to PVC cement**)

**Steel:**

- When installing the “steel basket” around and behind the Channel Drain, the rebar must be bent and formed so that the “basket” is behind and not touching the Channel Drain (see Figures 2 and 3).



**Figure 2**



**Figure 3**

**Shotcrete or Gunite:**

- Shoot or fill in the niche behind the Channel Drain when first starting to “shoot” the pool. Allow that material to cure for a while as you shoot other areas in the pool. Later, return to the Channel Drain and finish shooting and forming the concrete around the drain.
- Pack the concrete tightly under the Channel Drain and finish the wall around the drain to 1/2” below the lip, then make a finger wipe under the water stop of the drain so that finish material can be applied under the lip of the water seal.

## Installing the Dual Suction Channel Wall Drain

The Channel Drain may be configured to accommodate more than one pump by ordering from A&A Manufacturing and additional suction port to the bottom of the unit (see Figure 4).

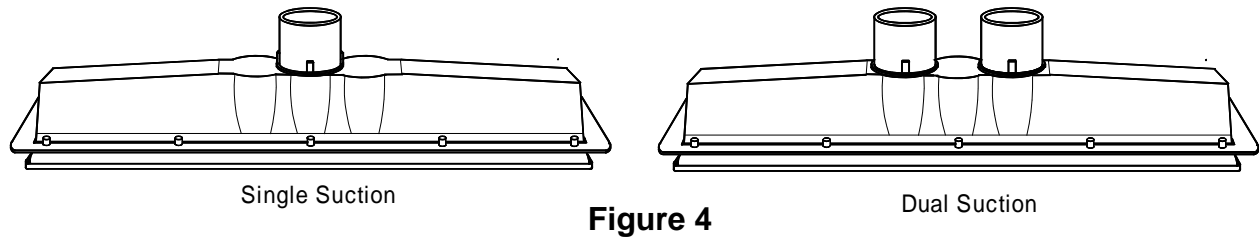
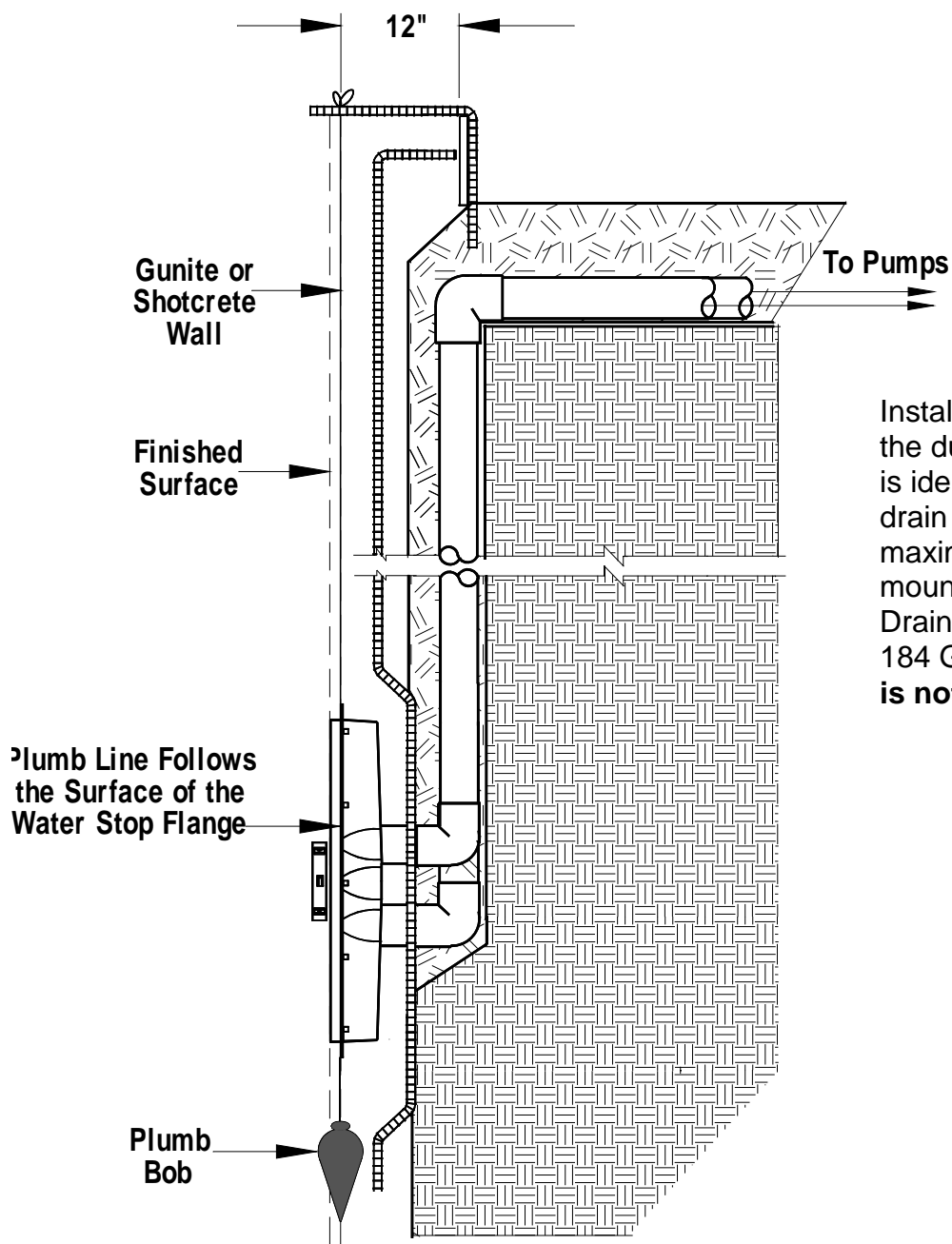


Figure 4



Installation and steel forming for the dual suction Channel Drain is identical to the single suction drain (see Figure 12). The maximum flow rate of the wall mounted Dual Suction Channel Drain, certified by the NSF, is 184 GPM. **Maximum flow rate is not to be exceeded!**