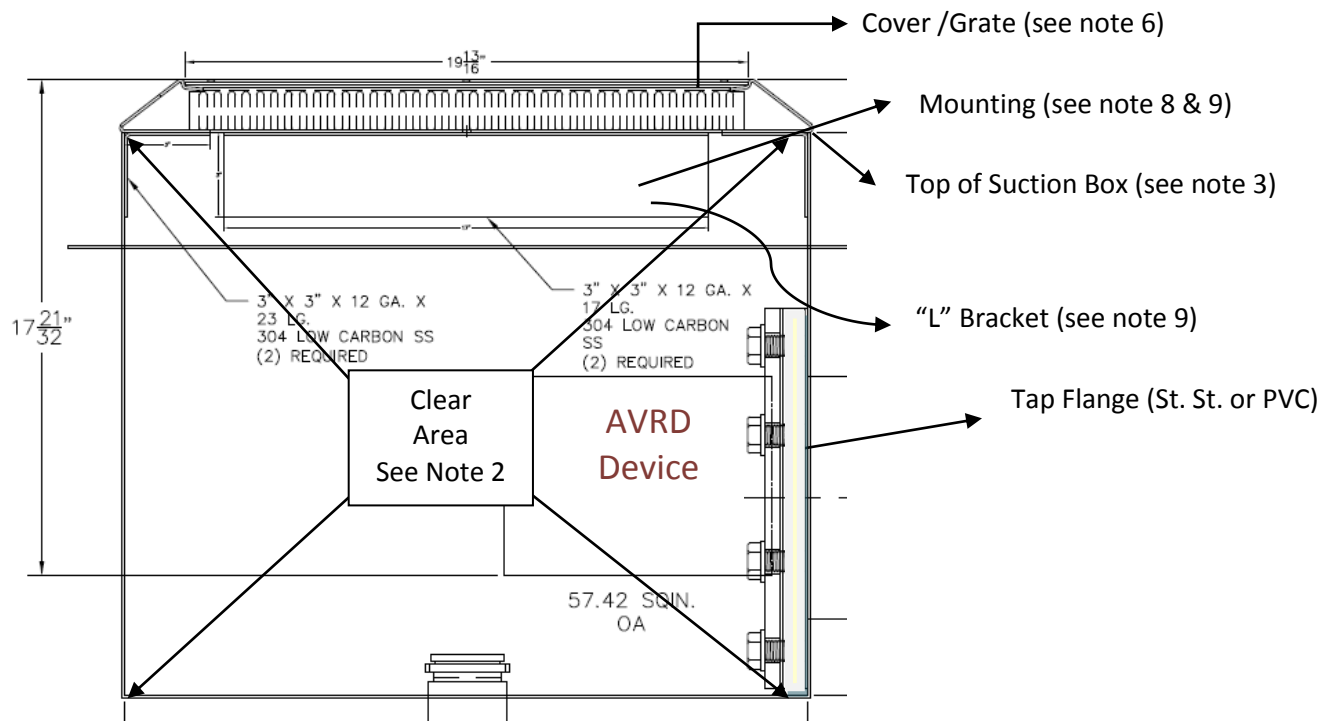


## Paddock Main Drain Removal & Installation Procedures

**REMOVAL:** Some applications below may apply to your job situation, but utilize as a reference guide.

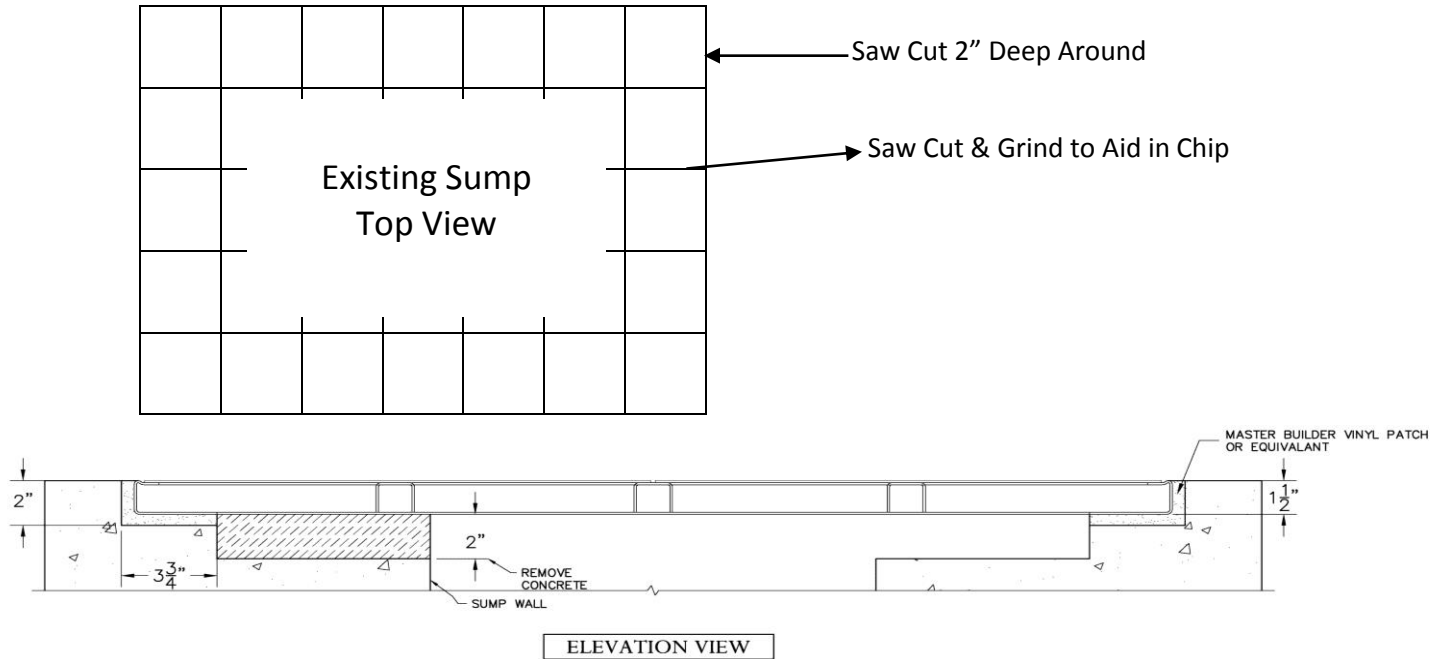
1. Remove existing cover/grate from suction box (not shown).
2. Cut out any internal cross bracing out of suction box. This is to get an open area from top to bottom and side to side.
3. At top of suction box, grind and smooth all edges back to sump area.
4. If Anti-Vortex Reducing Device (AVRD) is necessary, clean area around pipe. If necessary, trim suction pipe back to wall and grind area smooth.
5. If AVRD has been purchased refer to AVRD devices retro-fit literature for instructions (if not, go to Step 6)



6. Remove cover/grate from frame (9 screws). "Mark relation of cover to frame". Lay frame over suction box (eyeball condition). Refer to highlighted section on page 4 for instruction.
7. Decide how you want to mount the NSF/VGB approved main drain.
8. If it falls inside the sump, use mounting hardware such as angle supports. If it is outside the sump use stainless steel tap cons to mount on the outside area of pool surface.
9. If L- Brackets are needed mount those to sump wall with stainless steel tap cons.
10. **Installation Procedures for (PCFC) flat cover. Reference Page 2 drawings at top.**
11. Use frame as a template to mark outline of pool floor.

## Paddock Main Drain Removal & Installation Procedures

12. Remove cut out material as required to accommodate cover.



- Using a concrete saw blade. Cut marked outside edges to the desired depth, as provided in Paddock certified suction box drawing.
- Cut a grid 4-5 inches on center at a depth of 2 inches to assist with removal of material.
- Remove 2 inches from existing suction outlet in order to match the newly removed concrete area adjacent to the suction outlet.
- Use a cupped diamond blade on an angle grinder. Bring newly removed concrete to a flat smooth finish.

### INSTALLATION:

13. Bonding new cover and grate to a stainless steel suction outlet box (Electrical Inspection may be required).

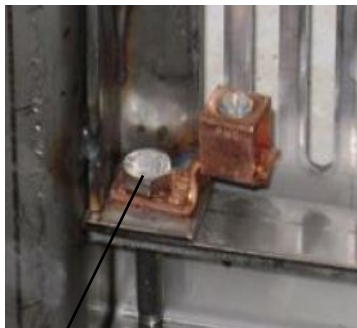


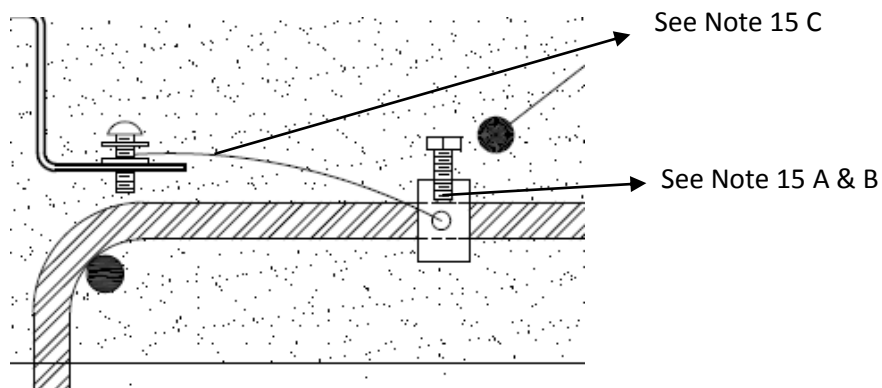
Fig #1  
Refer to 13A



Fig # 2  
Refer to 13B

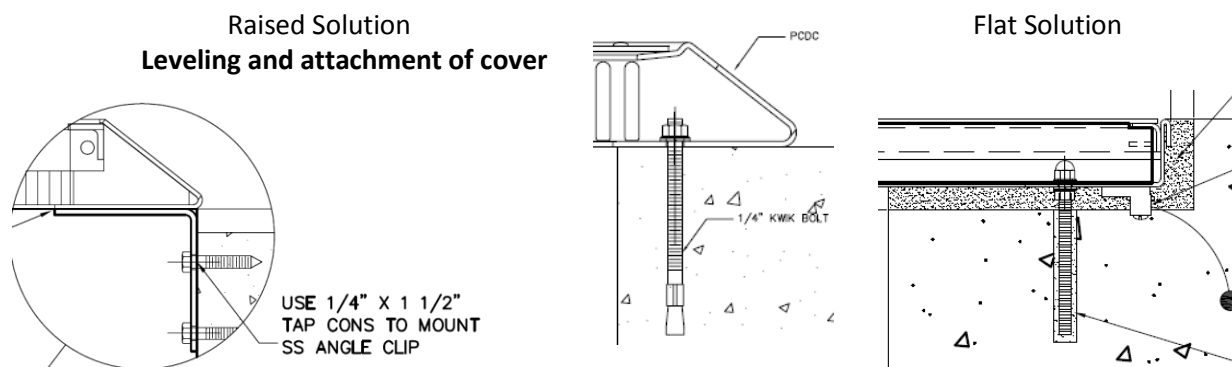
## Paddock Main Drain Removal & Installation Procedures

- a. Attach grounding lug to existing stainless steel suction outlet box. ( not provided )
- b. Attach grounding lug to cover and attach 8 gauge grounding wire from box to frame.
14. Encapsulate grounding wire and lugs with an epoxy to prevent leaching.
15. Bonding new main drain to a concrete, plastic, or fiberglass suction box (Electrical Inspection may be required).
  - a. Chip to find rebar in structural frame of pool, which is grounded.
  - b. Attach grounding lug to existing structural rebar. (reference National electric code 680)
  - c. Attach grounding lug and 8 gauge grounding wire to structural frame of pool.



Refer to 15d, 15e, and 15f

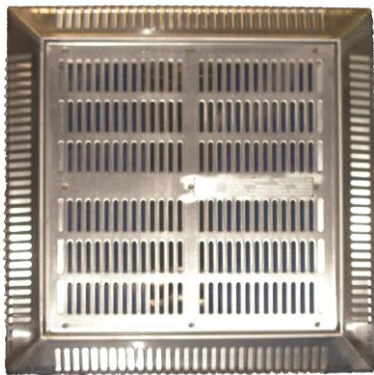
- d. Use hydraulic cement to backfill chipped area around rebar. Backfill to area just below finish because you may have to patch area outside of cover with Marcite. ( or similar product )
- e. Attach 8 gauge grounding wire from structural frame of pool to cover.
- f. Encapsulate grounding wire and lugs with an epoxy to prevent leaching from grounding wire.



Refer to 15g, 15h, 15i, 15j, and 15k

## Paddock Main Drain Removal & Installation Procedures

- g. Drill four holes in bottom of cover frame for anchoring to floor.
  - h. Place frame in hole and mark holes for drilling in floor.
  - i. Drill holes for a four inch stainless steel 1/4" threaded rod to a depth of 1 ½ inches. Use epoxy to cement in place.
  - j. Use a bond material such as Master Builder or Wall Builder to encase area for water tightness. Or a similar product.
  - k. Set wedge anchors and place a nut and washer roughly 1 5/8 inches below finished level of pool.
  - l. Place frame on anchors, using nut and washer installed in previous step. Level frame to appropriate height and use an additional lock nut and washers to secure cover.
16. Completing installation
- a. Make sure that cover is secure and flush to the existing pool finish
  - b. Marcite voids around frame if needed.
  - c. Give owner certificate of compliance and extra screw pack for cover.
  - d. Log date of installation once work is completed.



**CAUTION LABEL: REMOVE AND INSTALL SCREWS WITH SCREWDRIVER. DO NOT USE POWER TOOLS WHICH WILL OVER TORQUE AND CAUSE THE SCREWS TO BREAK OR STRIP. REMOVE LABEL BEFORE INSTALLATION.**

**NOTE: PLATE ALIGNMENT IS CRUCIAL. IF NOT PROPERLY ALIGNED, HOLES WILL NOT MATCH. MARK PLATE LOCATION ON FRAME TO MATCH FOR REINSTALLATION LATER.**

**\*\*\*** Make sure product is properly cleaned with CitriSurf77 Plus, Sheila Shine or similar after installation. Carbon contamination could show up as surface rust in a couple of months from dissimilar materials coming in contact with stainless steel. Example: **carbon drill bits or saw blades.**

## Paddock Main Drain Removal & Installation Procedures



Figure (1)

### TP-AVRD Threaded PVC

Just screw device into existing threaded pipe flange of sump. Make sure open area is facing down.



Figure (2)

### FP-AVRD Flanged PVC

Device has a mounting flange with threaded holes and counter sunk holes. Counter sunk holes are used for attaching mounting flange to the sump wall. (Use a caulking sealant to help with non-even surfaces of sump wall. Make sure to level or shim as necessary). Place mounting flange over pipe in the suction box. Drill and mount with SS tap con screws. After flange is mounted to wall, kit comes with a gasket ring and AVRD Device. Gasket is mounted next and then AVRD device. AVRD has an open slotted area that must face down. Secure the device (refer to figure 2) with bolts provided.



Figure (3)

### FS-AVRD Stainless Steel

Device has a mounting flange with threaded holes. Place mounting flange over pipe in suction box and then weld mounting ring to sump wall. After flange is mounted to wall, the kit comes with a gasket ring and AVRD Device. Gasket is mounted next and then the AVRD device. The AVRD has an open slotted area that must face down. Secure device (refer to figure 3) with bolts provided.

**GRAVITY ANTI VORTEX REDUCTION DEVICE (AVRD)s  
ARE CUSTOM DESIGNED PER JOB**

**Contact Paddock Pool Equipment Company for assistance.**