Home-Made External Standpipe for Fish Tank

UW-Stevens Point
Northern Aquaculture Demonstration Facility
What it Looks Like
Why an External Standpipe?

- No drain pipe in tank or other obstructions
- Ease of cleaning and working in tank
- Increased surface area for bottom tank screen
- Better solids removal due to bottom drain draw vs. top draw from internal standpipe
- Allows better control and easier access to the drain on larger tanks
Materials

- Devcon Home Plastic Welder (Epoxy) $5.99
- 3” x 3” x 1 ½” PVC “T” $5.99
- 3” x 2” PVC Reducer $3.79
- 1 ½” PVC Coupler $0.79
- 3” PVC for outer wall of standpipe (cut to length) $15.99/3=$5.33
- 1 ½” PVC for standpipe (cut to length) $6.49/3=$2.16
- Clear PVC Primer $4.29 (4oz.)
- All Weather-Medium-Clear PVC Cement $4.29 (4oz.)

All PVC used is schedule 40 PVC Total = $32.63

All materials were purchased at a local hardware store

Our standpipe is designed for 60-400 gal. tanks

This is the price to make one standpipe. The price will be cheaper for additional standpipes because the initial adhesives can be used to make several standpipes.
Step 1

- Glue coupler in to small end of reducer using Devcon Plastic Welder.
- Make sure it is level and let stand for 24 hours. (See instructions)
Step 2

- Glue reducer in to “T” using PVC primer and cement (first apply primer, then apply cement).
- Direction of 1 ½” portion of “T” is sloping downwards for the drain pipe.
Glue 3” PVC to “T” using PVC primer and cement. Cut 3” PVC to desired length depending on the height of your tank.

Assembled unit before installation on tank.

(see picture at left)
Step 4

- Cut standpipe to desired length. You want it to stick out of the top of the 3” pipe by a couple of inches so you can grab it. Chamfer the bottom of the standpipe to make it easier to put back in.

- Cut notch in side of the standpipe to determine water level in tank. Water will flow in this notch and down the stand pipe.

- It is critical to properly size the notch in the standpipe based on water flow in to tank.
Step 5

- Attach assembly to tank and drain in any way you desire. This is what ours looks like.
Some Additional Pictures