

Rain water installation photos - 2008



Here is an installation of two tanks at Treeseach Farms in Houston. We used 2" pipe to connect the two tanks, but each has its own inlet from the gutter system and overflow from the tanks. The 2" pipe leads to a 1 HP pressure booster pump, and from there to the water lines and hose bibs. They are using this for hand watering a greenhouse. Final plans are for 6 total tanks with a total capacity of approx 15,000 gallons.

The photo on the left below shows a completed first flush filter and stand pipe, using a custom built angled leaf screen on top. Inside the 6" stand pipe is a floating ball that acts as a check valve diverter. The stand pipe is self draining using a "dribble" valve assembly.



These photos are from an installation in Montgomery, Texas at the Charles B. Stewart branch library.

The booster pump has an internal pressure switch and flow control, eliminating the need for a separate pressure tank. Note the inline filter, and separate valve for a water level sight gauge using clear vinyl tubing.

The first flush filter and stand pipe has a custom built stand and the gutter assembly will end approximately 2 to 3 inches above the angled screen. The force of the incoming water washes most debris off of the screen.



This is the interior of the tank, showing the inlet and the water “slow down” using an upturned section of pipe. You can also see the water level control using a 24 VAC irrigation control valve. I have also used a manual water level control using a standard float ball assembly. Water exits the tank to the pump via the 2” pipe in the center of the photo. Note the 8” extension and 90 degree elbow to allow cleaner more settled water to exit the tank to the pump.

The overflow pipe uses a “tee” at the top, and a slotted “siphon” at the bottom to perhaps remove some sediment as the overflow water exits.



This is the dribble valve showing the screen assembly. This is the bottom part of the first flush stand pipe.

Once a month, the cap is unscrewed, and the screen cleaned. Water flow is controlled by adjusting a ½” ball valve attached to the barbed fitting using poly pipe.

