



Making a Self Watering Container



Suggested Parts and Equipment Needed

Parts

- One each 18 gal. container
- Plant tray 16x22
- 20" piece of 1" black water pipe or PVC
- Top of container
- 3ft X 2.5ft piece of weed block or other type fabric (non-toxic)

Note: Different sized containers may be used. Scale other parts as needed

Tools

- Electric drill
- Utility knife
- 5/8" drill bit
- 1 1/2" or 2" hole saw



Making the Reservoir

The reservoir is anything that can create a false bottom in the 18 gallon container. In this case it is a standard 16 X 22 X 3 1/2" plant tray which will create about 3 gallons of space. Other ideas are PVC drain pipe, higher plant trays, bottom ends of soda bottles (you have to make holes in them for air to pass) and milk containers. The list is endless. Notice the holes in the plant tray.

Cut one round hole 1 1/2" to 2" in diameter in one of the corner pot areas.

Cut two round holes 4" in diameter in the center pot areas to create a wick area.



Fitting the Reservoir

The edges of the plant tray may have to be trimmed in order to make the tray fit into the bottom of the reservoir. Make sure the tray is all the way to the bottom of the container when finished.

Notice the two 4" round holes in the center pots creating the wick areas.

Notice the one hole 1 1/2" to 2" in diameter in one of the corner pot areas.



The Reservoir Cover

The cover made of weed block or other non-toxic porous cloth allows water to wick to and from the reservoir beneath.

When covering the reservoir, make sure that you force the cloth into the wick holes all the way to the bottom of the container. These holes will be filled with potting mix when the container is finished.

Tuck the cloth all the way around the reservoir so it will be hard for the potting mix to get into it.

Notice the depression of the cloth into the two wick holes you created in the reservoir.



The Top of the Container

Using the utility knife, cut a rectangle out of the top of the container leaving approximately one inch inside the edge stiffener. The top will be structurally sound around the edges and will keep container from bowing at the top edge.

In the example to the left, the cut-out was 10 by 14.



Placing Holes in the Top of the Container

Drill four holes in the corners for optional plant stakes.

Note: Make sure to drill on one side or the other of the top stiffener in the corner.

Using the drill and hole saw, cut a hole big enough for the 1" drain pipe To fit through. In this case 1 1/2"

IMPORTANT Note: The hole must be drilled in the corner of the top that matches the corner hole in the reservoir. This is where the fill tube will go.



Installing the Fill Tube

Fold back the reservoir cloth to reveal the corner hole in the reservoir.

Place the top on the container ensuring the fill tube holes that were made in the top and the reservoir are aligned over one another.

Insert the fill tube through the top and into the hole that was made in the reservoir.

When finished inserting tube, unfold the reservoir cloth and tuck it around the tube securely so soil won't enter the reservoir.



The Finished Top

The finished top should look very similar to the picture on the left.

Notice the 4 corner holes, the fill tube, and the reservoir cloth neatly tucked in.

The Very Important Weep Hole

The weep hole ensures that your plants will not be overwatered.

Drill a 5/8" hole in the side of the container where the fill tube was installed. The hole should be located at the top height of the reservoir. For Example, the plant tray is 3 1/2" high. Your weep hole should be no lower than that height from the bottom of the container.



Installing Optional Plant Stakes

If you are going to grow plants that need support, you need to install plant stakes in the corners.

The 5/8" hole is designed to fit a standard 7/16" by 6 foot plant stake.

Place one of the stakes in each of the four 5/8" holes that were drilled in the corners.

Press them all the way to the bottom of the container so they will be firmly in place when the potting mix is put into the container.



Tying Up Loose Ends!!

If stakes were installed, tie the top ends together to form a teepee.

Tying the stakes together gives the whole container structural strength and will allow you to drape netting over the plants to keep animals from swiping your vegetables.



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