



Assembly Instructions: 2x2 BioActive Cabinet



Note: How to not strip your screw holes.

Do not continue turnign the screw once it is fully seated or you will strip the screw hole and the screw will not stay seated.

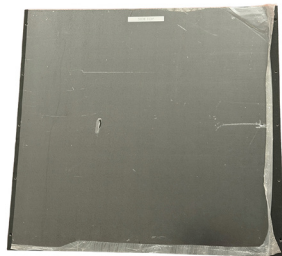
Step 1: Unpack and Verify Contents

Carefully unpack the box and find each item. If there is anything missing or if there is shipping damage please contact me at bill@dragonstrand.com.

Back Panel



2 * Side Panel



Front Panel



Bottom Panel



Door Panel



Drainage Tray



Drain



4* Wheels(Casters)



CAB - Cabinet Assembly

35 * #6 Screws



BOTTOM - Cabinet Assembly

5 * #4 Screws



WHEEL Attachment Screws

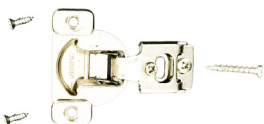
16* 1/2" Screws



Screw Covers



2*Door Hinges



Assembly



1) Attach one side panel with the back panel. There is a groove in the side panel to seat the back panel. Make sure the "TOP" sticker is up. Use Cabinet Assembly Screws to connect them.



2) Add the second side panel repeating the actions of step 1.



Note: You can remove the protective film on the PVC sheets at any time.



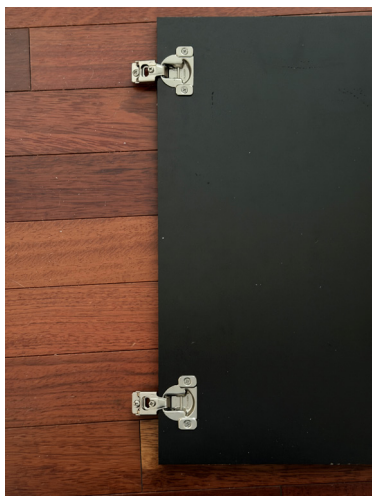
3) Fit the Front panel in the grooves provided by the side panels and attach using Cabinet Assembly Screws



4) Add four casters to the Bottom Panel. Each corner of the bottom panel has four pilot holes for the casters. Place the casters in position and drive in four WHEELS screws for each caster.



5) Place the cabinet assembly upside down and carefully drop in the bottom panel with the FRONT sticker towards the front. Attach the bottom panel to the front panel using the five BOTTOM screws and then the other panels from the sides using CABINET screws.



6) attach door hinges to Door Panel in two places using DOOR short screws.



7) Place the cabinet assembly on its back. Hold the door in the open position with the latches down over the pilot holes in inside edge of the front panel. Attach the ledge with the long screws in the DOOR bag.



8) To install drain in Drainage Tray, unscrew the washers from the drain. **IMPORTANT** - The paper washer is critical. Save it!

Insert the drain inside the drainage tray so the threaded part comes out the bottom.

Note: For added protection, you can put a bead of silicone around the drain area before putting the drain in the tray.



9) To complete the drain installation, replace the washers in this order

- Rubber washer
- paper washer
- locking nut

These all go under the tray. Tighten the locking nut until the assembly is water tight.

(The thicker nut is used only when attaching PVC piping.)



10) Place the drainage tray assembly on the cabinet assembly. There is a guardrail backstop on the sides and back. The front, which should be towards the cabinet door, does not have the guard rail.

Attach Cage to Drainage Tray.

In this step, we'll secure the cage to the drainage tray so the two units function as one solid structure. The goal is to anchor the aluminum cage frame directly to the PVC supports beneath it, keeping the cage stable and preventing movement during cleaning or maintenance.

You'll drill pilot holes through the aluminum frame and into the PVC supports below. The screws will pull the frame snug against the tray for a strong, lasting connection.

Different cages vary slightly in frame width, so double-check that each hole lines up above a PVC support. Place holes close enough to reach the support but far enough from the edge to avoid blocking the front service door.

Four screws are provided. Use as many as are appropriate for your needs. At least one in back and one in front is suggested.

Tools Necessary:

Electric drill

7/64" or 1/8" drill bit

Manual Phillips Head Screw Driver



1) Drill Pilot Hole

Now that the cage is in place on top of the drainage tray, we'll secure the two together so they act as a stable, secure unit. This keeps the cage from shifting when you clean or move it.

1. Position the cage exactly where you want it to sit on the drainage tray. Make sure the front service door can open freely.

2. Along the front and back edges of the cage's bottom aluminum frame, locate where the PVC supports run underneath the aluminum frame. You'll want your screw to pass through the aluminum and into one of these supports for a strong connection.

3. Mark your drill spots near the outside edge of the aluminum frame — close enough to line up over the PVC support, but not so close that the screw head extends past the frame edge or interferes with the door closing.

4. Using a 7/64" or 1/8" drill bit, drill straight through the aluminum frame and about 1/2 inch into the PVC below. This single pilot hole allows the screw to grip the PVC while passing cleanly through the aluminum. Go slowly and steady pressure. Let the drill bit do the work to go through the aluminum.



2) Attach Cage

Drive a #6 x 3/4" screw through each hole.

IMPORTANT: Use a manual screwdriver as an electric screw driver will not know when to stop and will strip the screw hole.

Tighten until the screw is snug, but avoid overtightening. **Warning: If you continue driving the screw beyond the point where it is snug it will strip the hole and the screw will not hold.**



Once secured, check that the cage doesn't rock or shift, and that the front door opens smoothly.

Finishing the system

And, now it is time to develop your system. You can use the cage with the stock floor and use the active drainage feature. Just add a bucket below the drain. The bucket is not included, but is easy to find at any home improvement store.

When you are ready to add a soil floor you can remove the cage floor and use the drainage tray below to fill with bioactive soil and plants as shown in this enclosure that is planted and stocked with isopods and springtails.

