



Assembly Instructions: Bio-Active Stand



Note: How to not strip your screw holes.

If you purchased the caster shelf you will be driving a screw into a PVC floor. Take care not to strip the hole by continuing to turn the screw once it is fully 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.

4*Corner Frame Sides



8*Straight Frame Sides

Drainage Tray



Drain



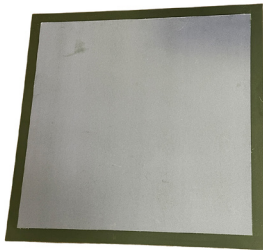
Cage Attachment Screws

4* 3/4" Screws



Caster Shelf + Screws

Shelf



Shelf Attachment Screws

4* 1-1/2" Screws



4* Wheels(Casters)



Wheel Attachment Screws

16* 1/2" Screws



Assembly



1) Build 2 Square Frames (Top & Bottom). The bottom has predrilled holes in the frame.



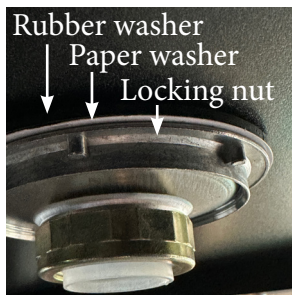
2) Install 4 verticals on Bottom Square Frame



3) Place Top Square Frame on top and gently tap all corners with a mallet to ensure all sides are fully seated



4) Remove protective film from Tray



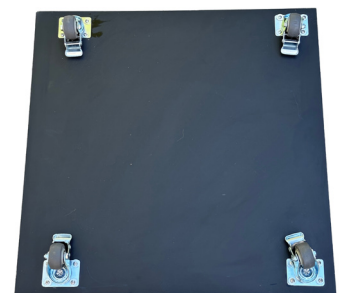
5) Install Drain in Tray. Rubber washer, paper washer and locking nut go under the tray.



6) If you ordered the caster shelf find the pre-drilled holes on the bottom for the casters (wheels) on each corner of the caster shelf



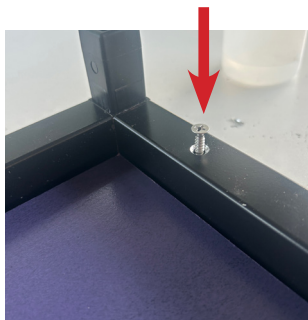
7) Attach casters in four places with four screws each. Be careful not to turn the screws beyond them being tight or it will strip the screw hole.



Castors attached



8) Carefully place the frame on the shelf. The frames with pre-drilled holes are on the bottom.



9) Drive four screws from top of frame and firmly screw them into the PVC floor below. Turn screw only until fully seated.



10) Place Drainage Tray on top of frame.



11) Place cage on top of tray. Cage front is where service door can freely open.

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.



12) 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.



13) Attach Cage

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