

How to Create a Community Compost Site



MATERIALS LIST

Material Description	Quantity (per 3 bin setup)	Estimated Price
4' x 4' pallets or boards	10	Pallets can usually be acquired for free from "big box" organizations such as Home Depot, Target, Pick 'n' Save, etc.
1½" galvanized screws to fixate frames	1 box	\$4.99/box
Covering material for sides & doors: Option 1 1/4" to 1" chicken wire covered by burlap bag. The smaller the chicken wire netting the better. It is needed to keep mice out of the bins. Burlap bags are used over the netting to prevent wire from poking people while turning the pile and to prevent material from falling out of the bin.	1 roll chicken wire 16 burlap bags (cut along the bottom and one of the side seams)	1" x 4' x 50' 20-gauge galvanized poultry netting: \$43.00/roll Burlap bags can usually be acquired for free from a local roaster
Option 2 4' x 100' roll Filter Fabric (FF Fabric) from Geo-Synthetics	1 roll	\$107/roll
½" PVC (5' piece is standard, but will vary depending on size of pallets)	2 per door (6 total)	\$2.79 per 10 feet (30 feet total needed)
¾" or 1" galvanized pipe straps	6 per door	\$1.29 for a 10 pack of ¾" straps \$4.89 for a 4 pack of 1" straps

EQUIPMENT LIST

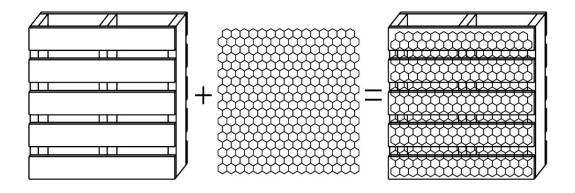
ltem	Description of Use
Staple gun and staples	To adhere covering material to walls and doors
Power screwdriver or drill	To adhere pipe straps to walls and create supporting structure
Hacksaw or PVC cutter	To cut down PVC or metal conduit
Different colored paint, paint pens, or permanent markers	To color code pipe straps per door
Tape measure	To measure inner width of bins and door
Chalk line or pencil*	To mark the amount of pallet to be removed during creation of the door
Hand saw or circular saw*	To create door
Hammer or crowbar*	To pry the smaller pieces of the cut pallet from the 2" x 4" when creating the door

^{*}In some cases, it may be possible to build the bin system without trimming the door pallets.

BUILDING THE FRAME

The frame is built with seven pallets, and each of these pallets should be covered with either chicken wire and burlap or Filter Fabric from Geo-Synthetics. Start by covering one side of five of the pallets and both sides of two of the pallets with chicken wire (Diagram 1). Cut chicken wire to size and then staple to each pallet on the side with more slats. Note that the pallets used on the interior walls will need to be covered on both sides.

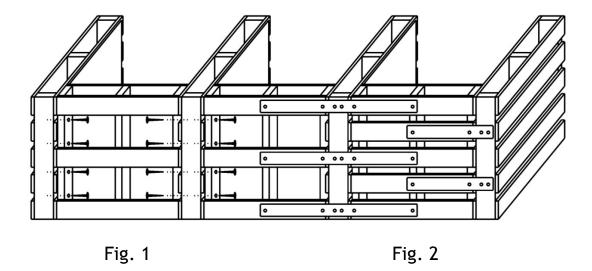
Diagram 1:



Cut the chicken wire shorter than the length and width of the pallet (while still covering all the holes) so that the wire does not extend past the edges of the pallet. If the chicken wire extends past the edges of the pallets, it will catch on the doors, loose clothing, hands, etc. The chicken wire is needed to prevent mice from entering the bins.

After attaching the chicken wire, it should be covered with burlap. Cut the burlap bags at the bottom and along one of the side seams to allow the burlap to spread out. Staple the burlap to each pallet over the top of the chicken wire. This will prevent people from getting scraped by the chicken wire and also help to keep compost from spilling out of the bins. Once again, the interior side walls need to be covered on both sides.

Diagram 2:



Once covered with chicken wire and burlap, build the framework of the bin system by screwing the seven pallets together at the joints shown above (Diagram 2). Note that there are several types of pallets so the exact location of screws may have to be modified depending on pallet type. If pallets are too difficult to screw together at the joints, as shown in Fig. 1, use a 1" x 6" or other reclaimed wood to brace the pallets together (Fig. 2).

Keep in mind that equal-sized pallets will be easiest to fit together. Additionally, try to build the bin system so that the three pallets remaining for the doors fit nicely in the spaces created by the frame (with about a $\frac{1}{2}$ " gap between the door and wall pallets). If the gap is too big, compost will spill out and rodents will more easily get into the bins. If the remaining door pallets are larger than the door openings, directions for trimming them are provided below.

If using Filter Fabric (FF Fabric) instead of chicken wire & burlap, build the frame first as shown above. Unroll and affix FF Fabric to the interior of the framework after assembly using a staple gun.

BUILDING THE DOORS

If the three pallets remaining for the doors are wider than the openings, they will have to be trimmed to fit as shown in Diagram 3.

- 1. Measure the width of the opening for the door and subtract 1 inch. Write this number down.
- 2. Lay your measuring tape on the soon-to-be compost bin door; make a mark for the measurement from step one. Do this at the top and then again at the bottom of the pallet.
- 3. Use a chalk line and snap (or use the pencil to draw) a line to connect the two points.
- 4. Repeat steps 2 through 3 on the opposite side of the pallet.
- 5. Use your circular handsaw to cut along the lines on both sides of the pallet.
- You should now have a longer board with smaller pieces attached to it that fell away when you made the two cuts. Pry the smaller pieces off of the longer board using a hammer or crowbar.
- 7. Take the longer board and reinsert it into the pallet where you made the two chalk line cuts.
- 8. Use nails or screws to fasten the thin horizontal boards to the board you just fit back into place.
- 9. Test fit your door step back and admire your work!
- 10. Cut the 10' ½" PVC pipe in half, leaving about an extra 3-4" on each side.
- 11. Attach the galvanized pipe straps keep them in line so you can slide the PVC to hold the door in place (Diagram 4). At the top of the bin, install one on each side of the opening and one on the door itself. Repeat this process for the bottom of the door. (Keep in mind that if you are constructing a multibin side-by-side system, you will need to stagger the locations of the PVC to allow for installation and removal of the PVC.)
- 12. Congrats! You now have a compost bin door. If you are using a multibin system, repeat the steps for the other doors.

When using your finished bins be sure to remove the door and PVC prior to flipping the contents into the next bin. There may be pressure on the door when the bin is full, making conduit removal difficult - push in on the door to allow the PVC to be removed easier.

Diagram 3 (steps 1 - 8):

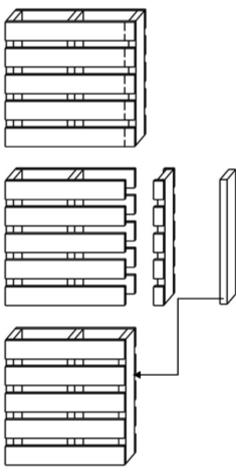


Diagram 4 - Finished Compost Bins

