



OFFICE OF  
SUSTAINABILITY  
COUNTY OF SAN MATEO

## Wood and Wire Stationary 3-Bin System



This system is used to compost large amounts of yard materials in a brief period of time. This unit can be built for approximately \$500.00. Construction requires basic carpentry skills and tools. Do not use treated wood or treat the finished 3-bin unit with wood preservatives or paint of any kind. Use recycled wood or redwood for all bin parts. Overall outside dimensions 9' wide x 36" deep x 32" high.

### Materials

#### Wood

- (3) 9-foot 2x4s
- (4) 12-foot or (8) 6-foot 2x4s
- (1) 9-foot 2x2
- (2) 6-foot 2x2s
- (10) 6-foot 2x6
- (1) 16-foot or (3) 6-foot 2x6s
- (9) 6-foot cedar 1x6s

#### Hardware

- 22 feet of 36" wide hardware cloth
- (12) ½" carriage bolts 4" long
- (12) ½" washers and 12 nuts for bolts
- Box of 2 ½" decking screws
- Box (250) of ½" wire staples
- (1) 12-foot and (1) 8-foot clear corrugated roofing sheets
- (3) 8-foot lengths of closure strips for corrugated roofing
- Box ¾" wafer head screws for corrugated roofing
- (2) 3" zinc plated hinges for lid
- (8) flat 4" corner braces with screws
- (4) flat 3" T-braces with screws

#### Tools

- Hand saw or circular power saw
- Drill with ¼" and 1/8" bits
- Staple gun
- Screwdriver
- Hammer
- Power stapler with 1" long
- Galvanized staples
- Tin snips
- Tape measure
- Pencil
- Socket or crescent wrench
- Carpenter's square
- Safety glasses
- Ear protection
- Gloves

## Dividers

- Cut (2) 31 ½ " and (2) 36" pieces from each 12-foot 2x4.
- Predrill the holes and butt end screw the four pieces into a 35" x 36" section. Use the square to make sure each divider section is square.
- Repeat for other three sections.
- Using gloves, cut four 37" long sections of hardware cloth, bend back edges 1".
- Stretch hardware cloth across each frame, check for squareness of the frame and staple screen tightly into place every 4" around edge.

## Set Up Dividers

- Lay out 2 of the 9-foot 2x4s and set up the dividers parallel to one another 3 feet apart.
- Measure and mark centers for the two inside dividers.
- Place (2) 9-foot base boards on top of dividers and measure the positions for the two inside the dividers. Mark a center line for each divider on the 9-foot 2x4.
- With each divider, line up the centerlines and make the baseboard flush against the outer edge of the divider. Drill a ½" hole through each junction centered 1" in from the inside edge.
- Secure baseboards with carriage bolts, but do not tighten yet. Turn the unit right side up and repeat the process for the top 9-foot board.
- Using the carpenter's square or measuring between opposing corners, make sure the bin is square, and tighten all bolts securely.
- Fasten a 9-foot piece of hardware cloth securely to the backside of the bin with staples every 4" around the frame.

## Front Slats and Runners

- Cut (4) 36" long 2x6s for front slat runners.
- Cut lengthwise two of these boards to 4 ¾ " wide and screw them securely to the front of the outside dividers and baseboard, making them flush on top and outside edges.
- Save the remainder of the rip cut boards for use as back runners.

- Center the remaining full width boards on the front of the inside dividers flush with the top edge, and screw securely.
- To create back runners, cut the remaining 2x6 into a 34" long piece and then rip cut into 4 equal pieces, 1 ¼ " x 2".
- Screw back runner parallel to front-runners on side of divider leaving a 1" gap for slats.
- Cut all the 1x6" cedar boards into slats 31 ¼ " long.

## Lid

- Cut (4) 32 ½ " 2x2s and (1) 9-foot 2x2.
- Lay out into position on ground as illustrated on front page and make sure they are square.
- Screw in corner braces and T-braces on bottom side of the frame.
- Center lid frame, brace side down on bin structure and attach to the back with hinges.
- Cut the wiggle board to fit the front and back 9-foot sections of the lid frame.
- Cut corrugated roofing to fit flush with front and back edges.
- Overlay pieces at least one channel wide. Pre-drill roofing and closure strips for each wafer head screw hole.
- Screw on top of every third hump with gasketed screws.
- Secure the lid to a fence with a hook or prop it up with a piece of wood while using the bin.

