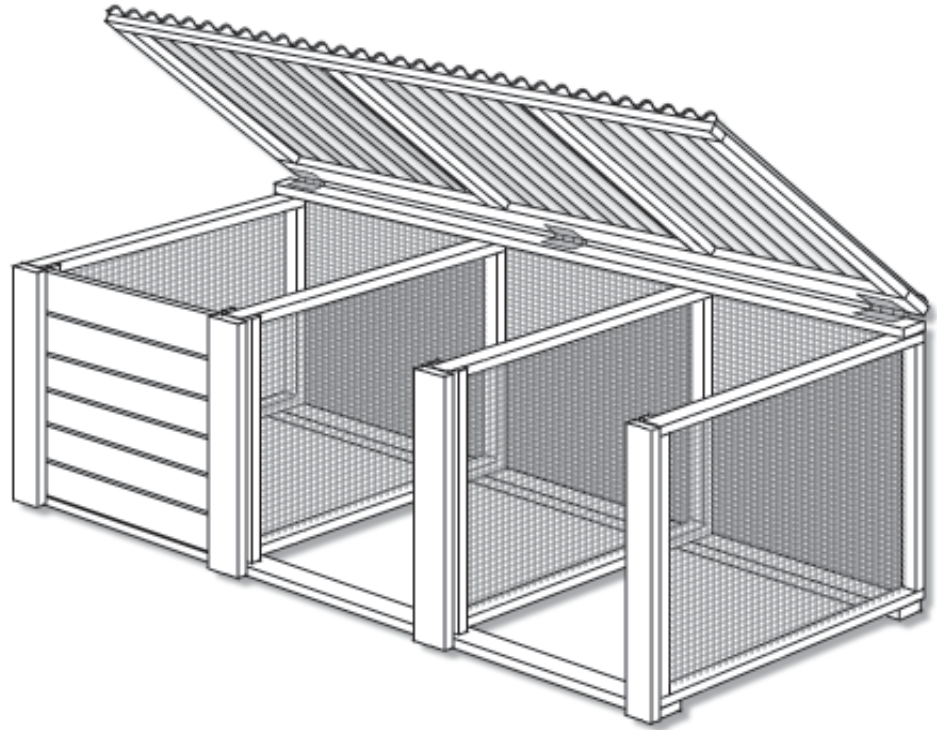


Three-Bin System

TOOLS

Tin snips
 Hand or power drill with 1/8" bit and 1/2" spade bit
 3/4 inch socket wrench or adjustable wrench
 Carpenter's square
 Staple gun or power stapler with staples
 Handsaw or circular saw
 Screwdriver
 Hammer



LIST OF MATERIALS

4 — 9 foot 2 x 4s
 4 — 12 foot 2 x 4s
 1 — 9 foot 2 x 2
 2 — 6 foot 2 x 2s
 1 — 16 foot 2 x 6
 9 — 6 foot 1 x 6s
 22' — 36" wide 1/2" mesh hardware cloth
 12 — 1/2" carriage bolts 4" long with nuts
 12 — 1/2" flat washers for the bolts
 2 — pounds of 3 1/2" galvanized nails
 1/2 — pound 2 1/2" inch galvanized casement (finishing) nails
 Carpenter's glue

NOTE: If you want to adapt this plan to have wooden sides and back, you will need only 10 feet of hardware cloth for the inside dividers, and you will have to add six 9-foot 1 x 6s for the back and twelve 3-foot 1 x 6s, six for each side. These boards may be nailed horizontally to the outside of the frame, starting with the top and bottom and then filling in the middle.

MULTI-BIN SYSTEMS

Multi-compartment compost bins allow for continuous processing of large amounts of materials. In a three-bin system, materials can be turned and mixed from the first compartment to the second, with the third compartment used for curing and storage.

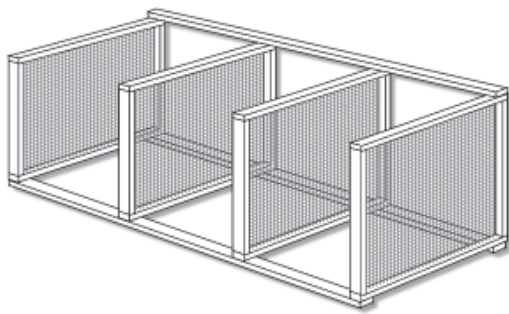
A three-bin system can simply be considered as two additional sections attached to a single compartment bin. A simple three-section unit can be constructed with seven discarded pallets lashed together. This particular design employs four identically constructed wooden frames connected to common top and bottom boards. It is adapted from a design originally developed for the Composting Education Program in Seattle, Washington.

CONSTRUCTION SEQUENCE

1. SIDES AND DIVIDERS

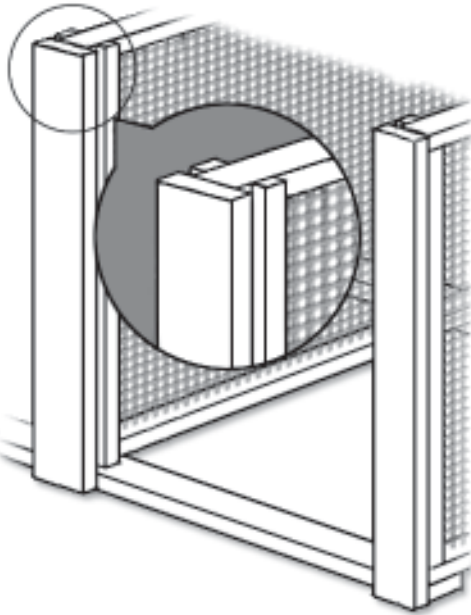
Cut two 31 1/2" and two 36" pieces from each 12' 2 x 4. Butt end nail the four pieces into a 35" x 36" square. Repeat for the other three sections. Cut four 37" long sections of hardware cloth, and bend back the edges 1". Stretch the hardware cloth across each frame, check for squareness of the frame, and staple the screen tightly into place every 4" around the edge.





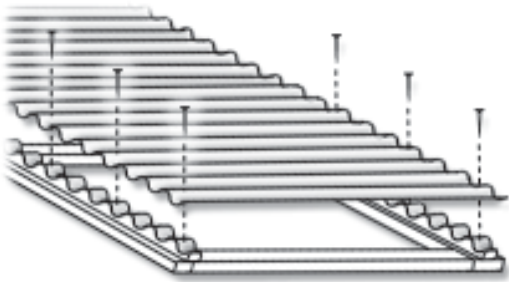
2. COMPOST FRAME

Set up dividers parallel to one another and 3 feet apart. Measure and mark centre for the two inside dividers. Place two 9' 2 x 4 base boards on top of the dividers and measure the positions for the two inside dividers. Mark a centre line for each divider on the 9' 2 x 4. With each divider line up the centre lines and make the base board flush against the outer edge of the divider. Drill a 1/2" hole through each junction centred 1" in from the inside edge. Secure the base boards with carriage bolts, but do not tighten yet. Turn the unit right side up and repeat the process for the top 9' 2 x 4. Make sure the bin is square and tighten all bolts securely. Fasten a 9' long piece of hardware cloth securely to the back side of the bin with staples every 4" around the frame.



3. RUNNERS AND FRONT SLATS

Cut four pieces 36" long from the 16' 2 x 6. Rip cut two of these boards to 4 3/4" wide and nail them securely to the front of the outside dividers and baseboard, making them flush on the top and outside edges. Save the remainder of rip cut for use as back runners. Centre the remaining full width boards on the front of the inside dividers flush with the top edge, and nail securely. To create back runners, cut the remaining 2 x 6 into a 34" long piece and then rip cut into 4 equal pieces, 1 1/4" x 34". Nail the back runners parallel to the front runners, leaving a 1" gap to allow the insertion of slats. Cut all the 1 x 6s into loose-fitting slats.



4. FIBREGLASS LID (OPTIONAL)

Use the 9' 2 x 4 for the back of the lid, and the 9' 2 x 2 for the front. Cut the 6' 2 x 2s into four 32 1/2" pieces, to run between the two 9' pieces (one at each end, flush with the 9' pieces' ends, and two in the middle, positioned to sit atop bin dividers).

Lay out in position on the ground and check for squareness. Screw together using the T braces and corner braces, then centre the lid frame, brace side down, on the bin structure and attach with hinges.

Cut the wiggle board to fit the front and back 9' frame pieces. Pre-drill the wiggle board with 1/8" drill bit and nail with 2 1/2" casement nails.

Cut the fiberglass to fit flush with the front and back edges of the frame. Overlay the pieces at least one channel wide and nail every third hump to the wiggle board with gasketed nails. Pre-drill the fiberglass and wiggle board for each nail hole.

FOR OPTIONAL LID:

- 4 — flat 4" corner braces & screws
- 2 — flat 3" T braces & screws
- 1 — 9' 2 x 4
- 1 — 9' 2 x 2
- 2 — 6' 2 x 2
- 1 — 12' sheet and one 8' sheet 4 oz. clear corrugated fiberglass
- 3 — 8' lengths of wiggle molding
- 40 — gasketed aluminum nails
- 2 — 3" zinc-plated hinges

