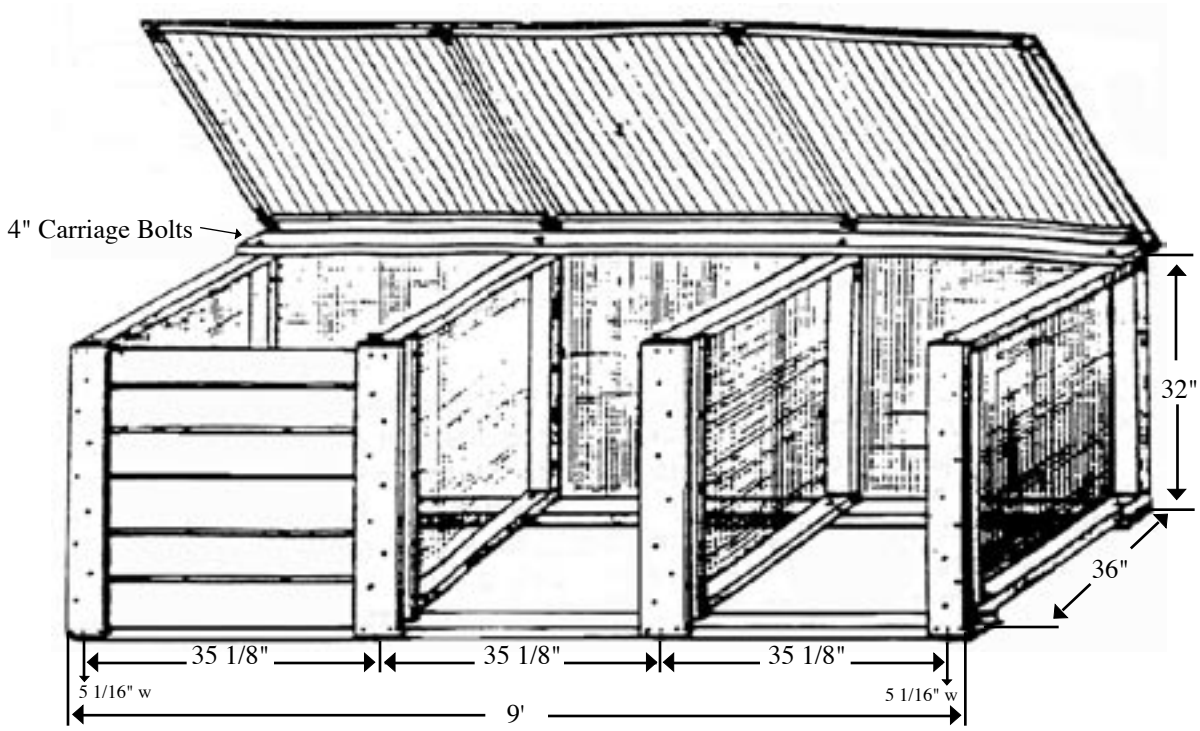
Wood and Wire Stationary 3-Bin System



This system is used to compost large amounts of yard and kitchen wastes in a brief period of time. Wastes are stored until enough are available to fill an entire bin. Materials are then chopped, moistened, and layered to ensure a hot compost. Piles are turned weekly for aeration. A pile made with a balance of fresh greens and woody materials and turned weekly can be ready to use in three weeks. The texture of the finished compost depends on the material composted. This unit can be built for approximately $130. Construction requires basic carpentry skills and tools.

Materials:

2 18' treated 2x4s
4 12', or 8 6' treated 2x4s
1 9' 2x2
2 6' 2x2s
1 16' cedar 2x6
9 6' cedar 1x6s
22' of 36" wide 1/2" hardware cloth
12 1/2" carriage bolts 4" long
12 washers and nuts for bolts
3 lbs. of 16d galvanized nails
1/2 lb. 8d galvanized casement nails
250 poultry wire staples or power stapler with 1" staples
1 12' sheet 4 oz. clear corrugated fiberglass
1 8' sheet 4 oz. clear corrugated fiberglass
3 8' lengths of wiggle moulding

Materials cont':

40 gasketed aluminium nails for corrugated fiberglass roofing
2 3" zinc plated hinges for lid
8 flat 4" corner braces with screws
4 flat 3" T-braces with screws

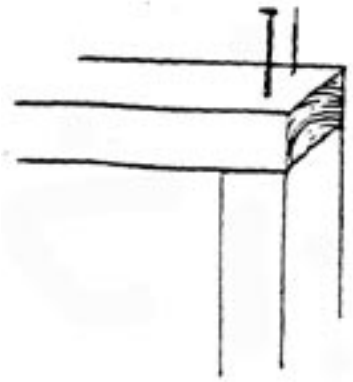
Tools:

Hand saw or circular power saw
Drill with 1/2" and 1/8" bits
Screwdriver
Hammer
Tin snips
Tape measure
3/4" socket or open-ended wrench
Carpenter's square
Power stapler with 1" galvanized staples (optional)
Safety glasses
Ear protection

Construction Details:

Build Dividers:

Cut two 31 1/2" and two 36" pieces from each 12' 2x4. Butt end nail the four pieces into a 35" x 36" square. Repeat for other three sections. 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 the edge.



Butt Nail Diagram

Set Up Dividers:

Set up dividers parallel to one another 3 feet apart. Measure and mark centers for the two inside dividers. Cut four 9' pieces out of the two 18' 2x4 boards. Place two 9' base boards on top of dividers and measure the positions for the two inside dividers, Mark a center line for each divider on the 9' 2x4. With each divider line up the center lines and make the base board flush against the outer edge of the divider. Drill a 1/2" hole through each junction centered 1" in from the inside edge. Secure base boards with carriage bolts, but do not tighten yet. Turn the unit right side up and repeat the process for the top 9' 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' long piece of hardware cloth securely to the back side of the bin with staples every 4" around the frame.

Front Slats and Runners:

Cut four 36" long 2x6s for the front slat runners. Flip 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 top and outside edges. Save remainder of 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 nail securely. To create back runners, cut the remaining 2x6 into a 34" long piece and then rip cut into four equal pieces, 1 1/4" x 2". Nail 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 1/4" long.

Fiberglass Lid:

Use the last 9' 2x4 for the back of the lid. Cut four 32 1/2" 2x2s and one 9' 2x2. Lay out into position on ground as illustrated on front page and check for squareness. Screw in corner braces and T-braces on bottom side of the frame. Center lid frame, brace side down on bin structure and attach with hinges.Cut wiggle board to fit the front and back 9' sections of the lid frame. Predrill wiggle board with 1/8" drill bit and nail with 8d casement nails. Cut fiberglass to fit flush with front and back edges. Overlay pieces at least one channel wide. Predrill fiberglass and wiggle board for each nail hole. Nail on top of every third hump with gasketed nails.