The Wood and Wire 3-Bin System Composter

The Greater Victoria Compost Education Centre
1216 North Park Street,
Victoria, BC V8T 1C9

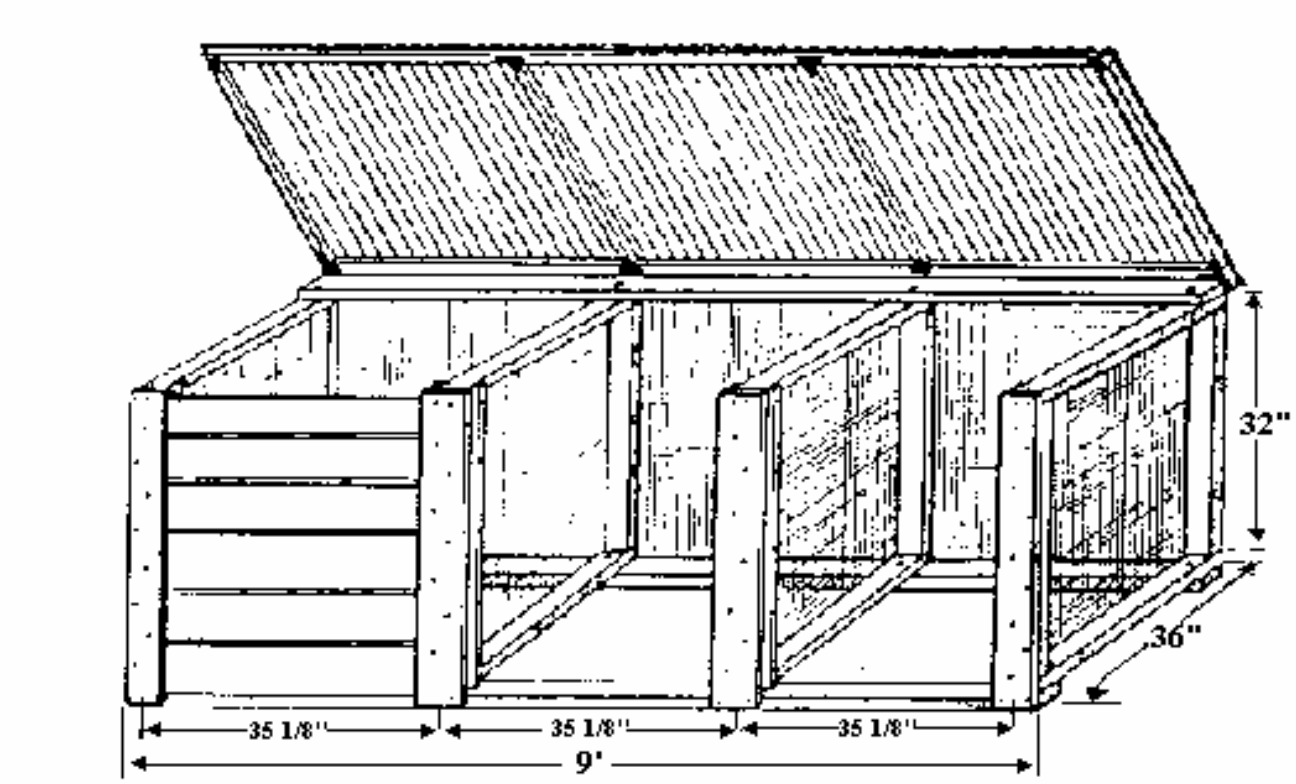
This system is used to compost large amounts of yard and kitchen wastes in a brief period of time. Wastes are stored until enough are available to fill an entire bin. Materials are then chopped moistened and layered to ensure a hot compost. Piles are turned weekly and can be ready in three weeks. The texture of the finished compost depends on the materials composted. This Unit can be build for approximately $300. Construction requires basic carpentry skills and tools.

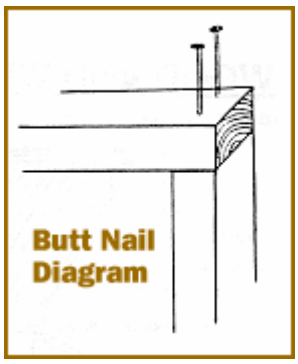
TOOLS

Handsaw or circular power saw
Drill with 1/2" and 1/8" bits
Screwdriver
Hammer
Tin snips
Tape Measure
Pencil
3/4" socket or open ended wrench
(option-power stapler with 1" staples)
Carpenter's square
Safety glasses and ear protection

MATERIALS

2 – 18 foot 2" x 4"s
4 – 12 foot or 8 - 6 foot 2"x 4"s
1 – 9 foot and 2 – 6 foot 2" x 2"s
1 – 16 foot cedar 2"x 6"
9 – 6 foot cedar 1" x 6"s
22 feet of 36 inch wide 1/4" hardware cloth
12 - 1/2" carriage bolts 4" long
12 - washers and 12 nuts for bolts
2 lbs of 3 1/2" galvanized nails
1/2 lb. of 8d galvanized casement nails
250 poultry wire staples (or power stapler with 1" staples)
1 – 12 foot and 1 – 8 foot sheet 4oz. clear corrugated fiberglass
3 - 8' lengths of wiggle molding
40 gasketed aluminum 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
Note: Do not use pressure-treated or chemically-treated wood for your compost bin. Prior to construction, treat the wood with a non-toxic wood preservative.





CONSTRUCTION

Build 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.

Set Up Dividers: Set up dividers parallel to one another and 3 feet apart. Measure and mark center for the two inside dividers. Cut four 9' pieces out of the two 18' 2"x4" boards. Place two 9' base boards on top of the dividers and measure the positions for the two inside dividers. Mark a center line for each divider on the 9' 2" x 4". 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 the base boards with carriage bolts, but do not tighten yet. Turn the unit right side up and repeat the process for the 9' board. Using the carpenter's square or measuring between opposing corners, make sure the bin is square or measuring between opposing corners, 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 2" x 6"s for front slat runners. Rip cut two of these boards to 4/3" wide and nail them securely to the front of the outside dividers and baseboard, making them flush on 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"s into a 34"long piece and then rip cut into 4 equal pieces, 1 1/4" x 34". Nail the back runner parallel to the front runners on side of divider leaving a 1" gap for slates. Cut all the 1" x 6" cedar boards into slates 31 1/4" long.

Fiberglass Lid: Use the remaining 9' 2" x 4"s for the back of the lid. Cut four 32 1/2" 2" x 2"s and one 9' 2" x 2". Lay out into position on the ground (as illustrated above) and check for squareness. Screw in the corner braces and T braces on the bottom side of the frame. 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' sections of the lid frame. Pre-drill the wiggle board with 1/8" drill bit and nail with 2 1/2" casement nails. Cut fiberglass to fit flush with the front and back edges. Overlay the pieces at least one channel wide. Pre-drill the fiberglass and wiggle board for each nail hole. Nail on top of every third hump with nails.