This system is used to compost large amounts of yard materials in a brief period of time. Yard materials can either be stored until there is enough to fill an entire bin, or added when they become available. Materials should be chopped and bruised, moistened, and mixed to ensure the compost pile gets hot. A pile can be ready for use in three to six weeks if it is turned every seven to fourteen days and has a balance of 50% fresh greens and 50% dried, brown or woody materials. Compost is more beneficial as a soil amendment when aged, but the aging process will add another three to six weeks. The texture of the finished compost depends on the materials composted, heat and moisture content.

This unit can be used to create compost or to hold materials to be used later in the garden. Construction requires basic carpentry skills and tools. Do not use treated wood or treat the finished 2-bin unit with wood preservatives or paint of any kind. Preservatives can leach into your compost. If you can afford the extra expense, using cedar for all bin parts will extend the life of the bin. A bin built per these specifications with cedar may cost between $350 and $400.
Materials

Wood:
5  12’ 2x4”s (for dividers and frame)  1  6’ 2x2”s (for lid)
10  3’ 2x2”s (for lid and front)  1  9’ 2x6”s (for baseboards and top)
6  6’ 1x6”s (front panels)

Misc:
1  6 feet of 36” wide, 1/2” hardware cloth
9  1/2” carriage bolts, 4” long
9  washers and 9 nuts for carriage bolts
3” wood screws for outdoor use.
1/2 lb. of 8d galvanized casement nails
1 lb. of poultry wire staples or galvanized hardware staples
12’ sheet of PVC roofing
6  2’ lengths of wiggle molding
32  gasketed aluminum nails for corrugated fiberglass roofing
2  3” zinc plated hinges for lid
4  flat 4-corner braces with screws
2  flat 3” T-braces with screws
Pencil
3/4” socket or box wrench, or adjustable wrench for securing the carriage bolts
Carpenter’s square
Safety glasses
Ear protection

Tools:
Hand saw, circular power saw or chop saw
Drill with 1/8” and 1/2” bits
Power screwdriver or impact driver
Hammer
Tin snips for cutting the hardware cloth
Tape measure

Construction Details

Build Dividers:
Cut two 32” and two 36” pieces from three of the 12’ 2x4”s. *Since the width of the 2x4” is actually 1 1/2” wide this creates a side that is 35”. Screw the four pieces into a 35”x36” square section. Note, the 36” pieces are the top and bottom of the divider which will create a bin that is 36” deep and 35” tall. Using a carpenter’s square or measuring between opposing corners, make sure each divider is square. Repeat for the other two sections. Cut three 37” long sections of the hardware cloth, bend back edges 1”. Stretch hardware cloth across the outside (pointed ends facing in) of each frame, and staple screen tightly into place every 4” around edge.

Set Up Dividers:
Set up dividers parallel to one another 3’ from the outside of the left divider to the center of the middle divider, and 3’ from the center of the middle divider to the outside of the right divider. Measure and mark the center of the inside divider. Cut four 6’ pieces out of two 12’ 2x4”s boards, two of which will be used as baseboards. Place two of them on top of dividers and measure the position for the inside divider. Mark a center line for each divider on the 6-foot 2x4. With each divider, line up the centerlines and make the base board flush against the outer edge of the divider. Drill a 1/2” hole
through each junction centered 1” from the inside edge. Secure base boards with carriage bolts, but do not fully tighten yet. Turn the unit right side up and repeat the process using the third 6’ long 2x4” along the top/back of the bin. Check to make sure the bin is square, then tighten all bolts securely. Fasten a 6’ long piece of hardware cloth securely to the backside of the bin with staples every 4” around the frame.

**Front Slats and Runners:**
Screw one 36” 2x2” on the inside, 1 ¼” from the front of the bin. Do the same for the right divider. For the center divider, screw one 36” 2x2” on each side. Cut three 36” 2x6”s and screw them to the front of the three dividers, to make runners for the front slats. Cut the 1x6” cedar boards into slats 30 1/2” long and slide them into the grooves behind the 2x6” runners. (See illustration below.)

![Top view -- front of bin](image)

![Back of Bin](image)

**Lid:**
The lid can be made from any one of a number of materials (PVC, Polychrome, Fiberglass, or Aluminum). To make the frame, cut three 32½” 2x2”s and lay out into position on ground with the 6-foot 2x2”s (front of lid) and the last 6’ 2x4” (back of lid) to form the lid frame as illustrated on page 1. Make sure the frame is square, then screw in corner braces and T-braces on bottom side of the frame. Center the lid frame, brace side down on bin structure and attach with hinges. Cut wiggle molding to fit the front and back 6’ sections of the frame. Pre-drill wiggle molding with 1/8” drill bit and nail with 8d casement nails. Cut the lid material to fit flush with front and back edges. More than one piece may be needed as the widths of the materials vary. Overlay pieces at least one channel wide. Nail on top of every third hump with gasketed nails.

Plan designed by Tilth Alliance Master Composter Kirsten DeLara, amended by Ben Barker and Roger Kelem