



Joe Van Rossum

Home composting is an easy and inexpensive way to create a valuable soil amendment from yard and household waste. Composting means less waste going into the landfill and less need for chemical fertilizers.

While many people simply pile their compost in a heap, others may want to use a bin to contain their compost and speed up the composting process. Compost bins vary in size, use, and cost, whether you purchase a commercial product or build one yourself. This publication, from a series of do-it-yourself plans, provides you with all you need to know to build your very own compost bin.

For more information look under Resources at the end of this publication.



Solid and Hazardous Waste Education Center

WOOD & WIRE COMPOSTER

This portable bin (figure 1) provides a convenient way to compost yard materials. It fits well in small spaces and may be used either as a holding bin or as a portable turning unit. To turn the pile, harvest the finished compost, or build a new pile, simply undo the latches, pull the sides apart, and move the bin. To turn the pile, simply transfer the composting materials back into the empty bin at its new location.

Cost: About \$100 with new materials; less if recycled materials are used

Capacity: Eight to ten 30-gallon bags of yard materials

Degree of difficulty: ★★ ★ Above-average building skills needed

How to construct

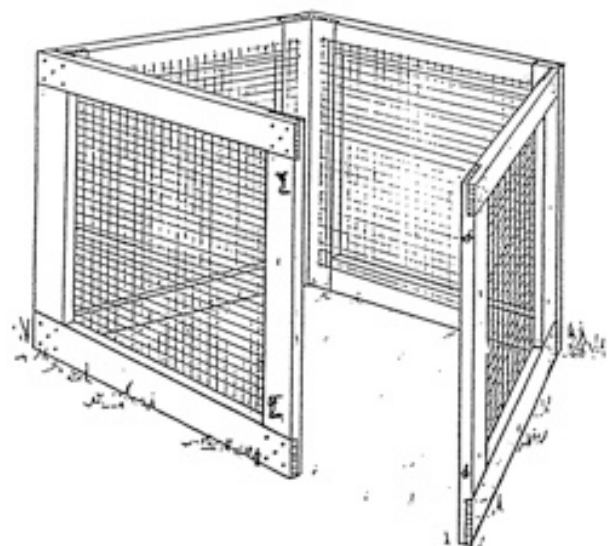
MATERIALS

- Four cedar or non-arsenic pressure-treated 2 x 4s, 12'
- ½" hardware cloth, 36" wide, 12'
- 100 galvanized No. 8 wood screws, 1½"
- Four galvanized butt door hinges, 3"
- 150 poultry wire staples or power stapler
- One tube exterior wood adhesive, 10 oz.
- Four large hook-and-eye gate latches

TOOLS

- Hand saw and chisel, radial arm saw with dado blade, circular saw, or table saw
- Hammer
- Screwdriver
- Tin snips
- Caulking gun
- Pencil
- Small carpenter's square
- Eye and ear protection

FIGURE 1. Wood and wire composter



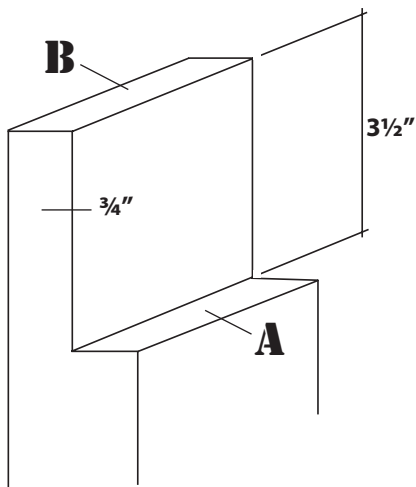
Building skills needed:

★ Little or none ★★ Some ★★★ Above-average

CONSTRUCTION DETAILS

- 1** Cut each 12' 2 x 4 into four 3-foot-long pieces.
- 2** Cut a $\frac{3}{4}$ "-deep and $3\frac{1}{2}$ "-wide section out of each end, for a total of 32 lap cuts.
- 3** **If using handsaw and chisel:** Cut $\frac{3}{4}$ " down at the $3\frac{1}{2}$ " line at **A** (figure 2). Then cut a deep groove into the end of the board at **B**. Place a thick wood chisel in the end of groove and split the wood with a hammer to the $3\frac{1}{2}$ " cut.
If using a radial alarm saw, circular saw, or table saw: Set the blade depth to $\frac{3}{4}$ " and make multiple passes until the whole $3\frac{1}{2}$ " section is removed.
- 4** Make four 3-foot square frames from the lap-jointed 2 x 4s. Add enough wood adhesive to fill the gaps when the lap joints are screwed together. Fasten each joint with five screws.

FIGURE 2. Section detail



- 5** Use tin snips to cut the hardware cloth into four 3-foot-square sections. Bend the edges of the cloth back over 1" for strength. Lay one onto each of the four frames. Center and tack each corner with a poultry wire staple. Hammer staples in every 4" along all four edges of the hardware cloth. Try to hold the cloth taut so it will not sag when filled with compost.
- 6** Connect each pair of frames together with two hinges, so the wire is on the inside of the bin, as shown (figure 3).
- 7** Finally, put the hook-and-eye-gate latches on the other ends so that the sections latch together.



Now you are ready to start using your bin and begin composting! Simply mix one part green (nitrogen) materials with two parts brown (carbon) materials (table 1), keep the materials as damp as a wrung-out sponge, and use a small shovel, pitchfork, or garden fork to mix the contents from time to time.

Source: Adapted with permission of the Seattle Engineering Department's Solid Waste Utility and the Seattle Tilth Association.

FIGURE 3. Connecting the frames

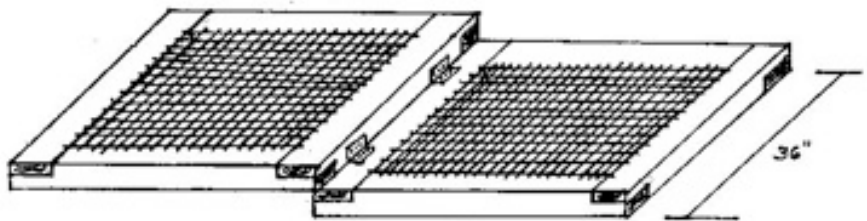


TABLE 1. Materials for composting

Brown materials (2 parts)	Green materials (1 part)
• Dry leaves • Twigs less than $\frac{1}{4}$" in diameter • Shredded newspaper • Shredded household cardboard: egg cartons, paper towel, and toilet paper rolls	• Green leaves • Grass clippings • Weeds (before they have gone to seed) • Leftover plants at the end of the season • Coffee grounds • Fruit and vegetable scraps • Eggshells
Do not compost: Meat, bones, grease, whole eggs, dairy products, diseased or highly invasive plants, pet waste.	

Resources

For more information on composting, including the Wisconsin Master Composter Program, contact:

Solid & Hazardous Waste Education Center (SHWEC)

www.uwex.edu/ces/shwec

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Composting to Reduce the Waste Stream
 (NRAES-43)

Plants and Life Sciences Publishing
 (PALS), Cornell Cooperative Extension
http://palspublishing.cals.cornell.edu/nra_order.taf?_function=detail&pr_booknum=nraes-43

Master Composter Resource Manual

Cornell Waste Management Institute
cwmi.css.cornell.edu/mastercompostermanual.pdf

These publications are available from the Learning Store (learningstore.uwex.edu):

Compost (A4021)

Do-It-Yourself Compost Bins series

- Barrel Composter (G4020-01)
- Can Composter (G4020-02)
- Concrete Block Composter (G4020-03)
- Wire Mesh Composter (G4020-04)
- Wood and Wire Composter (G4020-05)
- Wood Pallet Composter (G4020-06)
- Wood 3-Bin Composter (G4020-07)



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