



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.

CONCRETE BLOCK COMPOSTER

Concrete block bins are durable, require few tools, and can handle large amounts of yard materials.

Growing vines around the outside of these bins can soften their more "industrial" appearance. The following plans are for a one-bin unit (figure 1) or three-bin unit (figure 2). To make a two-bin unit, simply leave the third section off of the three-bin unit.

Block bins can be used as turning or holding bins. Turning or mixing will make the materials compost much faster. There are two ways to use the three-bin unit as a turning bin.

The first method is to build a compost pile in one end section, transfer the materials to the middle after a time, and then later transfer them to the third section.

The second method is to build two compost piles, one in each end section. Transfer materials from one section to the middle section and then back to original end section. Repeat the process for the pile in the other end section.

1-bin composter

Cost: About \$75

Capacity: Ten to twelve 30-gallon bags of yard materials

Degree of difficulty: ★★ Some building skills needed

3-bin composter

Cost: About \$160

Capacity: Thirty to thirty-eight 30-gallon bags of lawn materials

Degree of difficulty: ★★ Some building skills needed

FIGURE 1. 1-bin concrete block composter

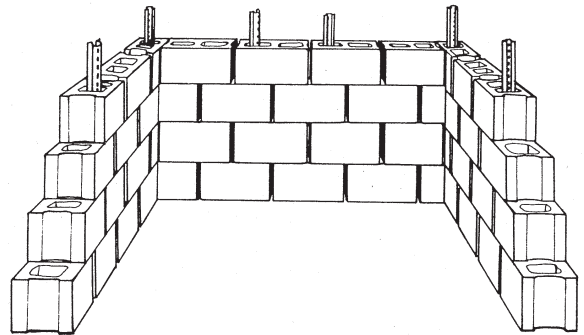
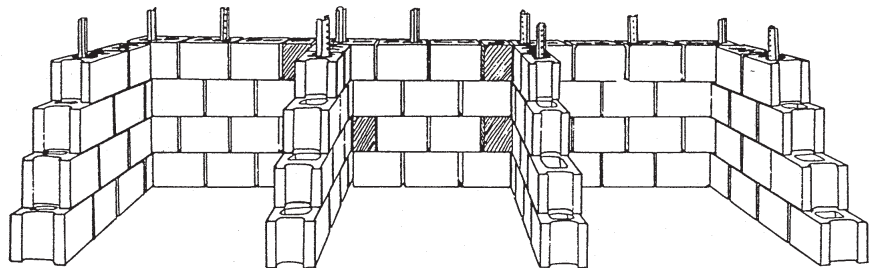


FIGURE 2. 3-bin concrete block composter



Solid and Hazardous Waste Education Center

Building skills needed:

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

How to construct MATERIALS

1-bin composter

- 38 concrete blocks (8" wide)
- Five 4'-long metal posts
- Chisel
- Work gloves
- Level
- Shovel
- Hammer or mallet

3-bin composter

- 86 concrete blocks (8" wide)
- Four half concrete blocks (8" wide)
- Eleven 4'-long metal posts
- Chisel
- Work gloves
- Level
- Shovel
- Hammer or mallet

Half blocks can be purchased or split from full blocks. Figure 3 shows a full concrete block with a central slit between the holes that makes it easy to split it into two half blocks. Score each side of the block in the plane of the slit with a chisel. Then use the chisel and a hammer to split the block along the score.

CONSTRUCTION DETAILS

1 Before you start construction of your bin, pick a good spot for it in your yard. The spot should be relatively level and not a location where water may pool or collect. Place concrete blocks on the ground, as shown in figure 4. For the base course, you will use 11 blocks for a one-bin unit or 25 blocks for a three-bin unit. Leave about a ½" between each block to let air in.

2 Add a second layer of blocks, staggering them to increase stability. Note the placement of the two half blocks (shaded) in the three-bin unit (figure 2).

3 Add a third layer of blocks, again staggering them to increase stability.

4 Add the last or top layer, staggering the blocks. Note the placement of the two half blocks (shaded) in the three-bin unit (figure 2).

5 To make the unit more stable, drive metal posts through the holes in the blocks as shown (figures 1 and 2).



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 from Composting to Reduce the Waste Stream (NRAES-43), Cornell Cooperative Extension.

FIGURE 3. Concrete block detail showing the central slit

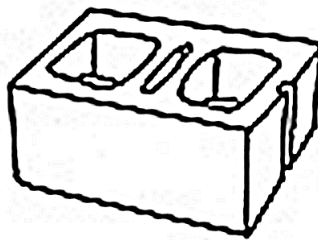


FIGURE 4. First layer of concrete blocks for the 3-bin unit

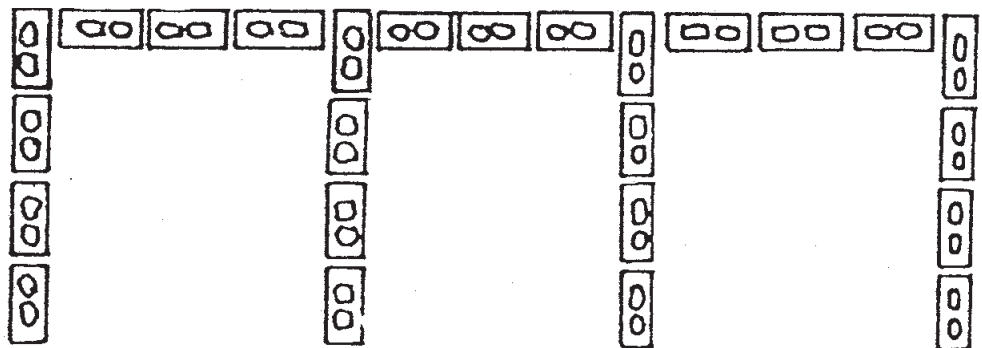


TABLE 1. Materials for composting

Brown materials (2 parts)	Green materials (1 part)
<ul style="list-style-type: none"> • Dry leaves • Twigs less than ¼" in diameter • Shredded newspaper • Shredded household cardboard: egg cartons, paper towel, and toilet paper rolls 	<ul style="list-style-type: none"> • 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
<p>Do not compost: Meat, bones, grease, whole eggs, dairy products, diseased or highly invasive plants, pet waste.</p>	

Resources

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

Solid & Hazardous Waste Education Center (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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