

DIY Plans

Modular Stacking Hot Pile Compost Bins



pictured:
4-ft. x 4-ft. bins

Makes five 3 ft. x 3 ft.* bins with 4 stacking 8" layers

See other side for schematic and jig-making illustrations.

Tools Needed

Miter Saw (recommended) or Skillsaw
Measuring Tape & Pencil
Carpenter's Square
Power Driver w/ Pilot Bit & Screw Bit

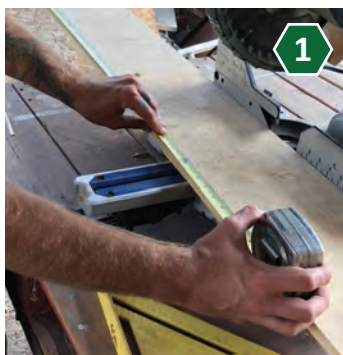
Materials Needed

40 6' 1" x 8" cedar fence boards*
7 8' 2" x 2" cedar studs
Box of 1 $\frac{1}{2}$ " Wood Screws

Two-person construction recommended

1) Measure Board

Find the center of one fence board and mark. Measure from both ends to verify that you are marking the center of the board (*photo 1*).



2) Mark Board

Use a carpenter's square to scribe a line along the center of the board (*photo 2*).



3) Cut Board

Taking into account the width of the saw blade, cut down the center of the line (*photo 3*).



4) Verify Cut

Stand the cut boards side-by-side to verify that they are equal length. If not, adjust your measurement or cutting process and retrim. It is more important for the boards to be of equal length than it is to be a particular length. Move to the next step only when the boards are equal (*not pictured*).

5) Make a Cutting Jig

Securely mount the saw to your work bench. Place one of the cut boards in the saw against the blade as if it had just been cut. Mount a block to your workbench that stops the far end of the board at the intended board length. Use the jig to cut all remaining boards. You will need 80 cut boards of equal length (*photo 5 and illustration 5 on other side*).



6) Cut Blocks

Cut 2 x 2 studs into 8" lengths. You will need 80 of these. Save remnants to use for your assembly jigs (*photo 6*).



7) Mount Block to Board

Place a block against end of a board, offset 1 $\frac{1}{2}$ " from top. Working from the board side (not the block), drill pilot holes and crew board to block using two wood screws. This forms the basic Side Piece (*photo 7*).



8) Make a Side-Piece Jig

Using your first Side Piece as a template, mount blocks of wood to your work bench to enable replicable, matching attachment of remaining blocks to boards (*photo 8 and illustration 8 on other side*).



9) Using the Jig

Place a block snugly in the jig (*photo 9a*).



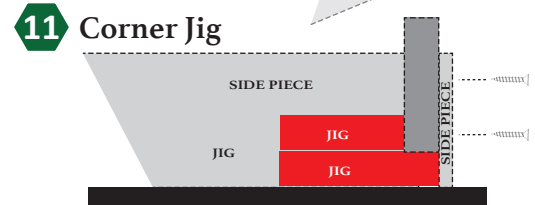
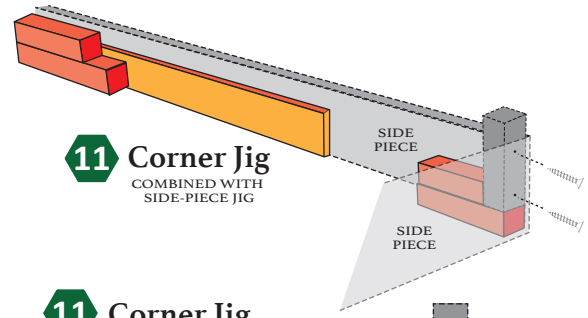
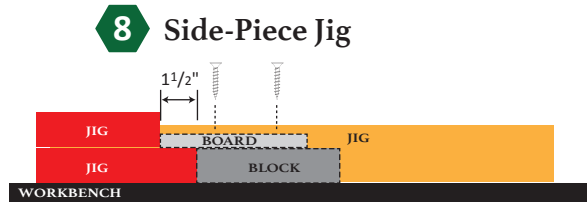
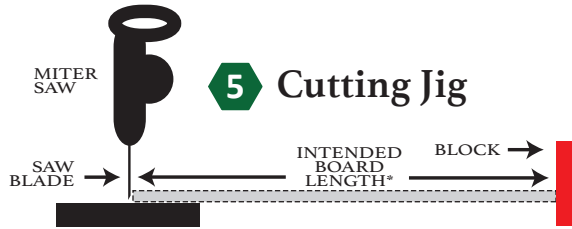
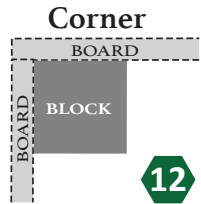
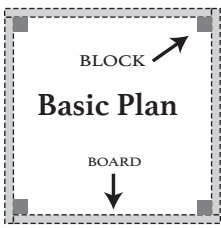
Place a board over the block and snug pieces against the jig. Verify that the block overlaps the board by 1 $\frac{1}{2}$ " (*photo 9b*).



**Size of bins can be adjusted to any square dimension by cutting boards to desired lengths; e.g., to make 4-ft. x 4-ft. bins (pictured), buy 8-ft. fence boards and cut them 48" long.*

MAKE THIS JOB EASIER USING JIGS. This is a modular, stacking system, so it is important that all pieces are built to the same dimensions. Therefore, measure all materials accurately, and cut such that every board is as exactly alike other boards as possible. To aid in this outcome, we recommend using jigs in which to place

boards for cutting and assembly. Jigs are easily made from scrap wood mounted to your workbench in such a way that boards placed in them are exactly where they need to be for cutting or assembly. Time spent building a jig will be paid back tremendously as you cut and assemble 80 pieces, and help prevent wasting materials.



10) Assemble a Side Piece

Using a pilot bit, drill two pilot holes through the board into the block. After drilling your first set of pilot holes, make a mark on the jig where they go.

Using two wood screws, attach the board to the block (*photo 10*).

Repeat until you've assembled 80 Side Pieces. Stack for later use (*photo 10b*).

11) Make a Corner Jig

Mount blocks of wood to your workbench that hold two Side Pieces together in proper orientation (*photo 11a and illustrations 11 above*).

Combine the Side-Piece Jig with the Corner Jig to hold both side pieces in place (*photo 11b*).



12) Assemble a Corner

Using your jig, put two Side Pieces together such that one board overlaps the other around the block. Be sure to overlap boards the same each time (*photo 12 and illustration 12 above*).

Drill pilot holes and screw two Side Pieces together to make a Corner Piece. Repeat step.



13) Assemble a Layer

Place two Corner Pieces upside down on the ground next to each other (*photo 13a*).

Drill pilot holes and use screws to assemble the two Corner Pieces into a Layer, making sure that boards are tight against the blocks and even at corners.

Use your first Layer as a jig to hold subsequent Layers together while you assemble them (*photo 13b*).

14) Finishing Up

Turn stacked Layers over so that the blocks act as short legs and nest inside lower Layers.

Treat with wood preservative, stain or paint.

Four Layers stack together to make one Bin. You'll need five Bins (*photo 14*).

To Use

Start piles in the outer Bins, alternating between ends when starting a new pile. Turn weekly into inner Bins. Combine piles into middle Bin in final turn.



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