Building a Compost Bin

Basic steps for building a compost bin.

Go green and help the environment while making an attractive and functional compost bin. The AB Courtyard Collection is versatile enough to create a larger compost bin to take care of your recycling needs in just a weekend.

The dimensions of this compost bin are approximately: 34 in. H x 70 in. D x 55 in. W (0.9 m H x 1.8 m D x 1.4 m W).

**Step 1: Layout**
Determine the location of your compost bin and lay out the first course of blocks using the pattern in Layout 1 to determine the shape of your bin and establish where to dig the trench. Once you have your layout, check to make sure the blocks are square by measuring diagonally from each back corner to the opposing front corner before digging the foundation pad trench.

**Step 2: Build the Foundation Pad**
Mark the location of the walls with a shovel, remove the blocks and sod, and dig a level trench that is 3 in. (75 mm) deep and 7 in. (178 mm) wide. Place 3 in. (75 mm) of crushed rock in the trench and compact using a hand tamper.

**NOTE:**
The soil beneath the foundation pad must be a good quality compactible material. If soft soils are encountered, they will need to be removed and replaced with additional crushed rock. A good foundation will ensure a stable wall for years to come.

**Step 3: Level**
Level the base trench. Make any adjustments as needed by adding or removing crushed rock.

**Step 4: Build the First Course**
Once you have a level foundation, you can begin building the first course of your compost bin. Using the pattern in Layout 1, start with the corner block on the back wall. Each course will require an AB York or an AB Dublin block to be cut or split.

See How-to Sheet #210 for more information on cutting and splitting blocks.

Place each block and check for level from front to back and side to side before placing the next block. This will ensure that the blocks will line up properly, and help keep them level with each other.
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Step 5: Check for Square
Once the first course is installed, use a measuring tape to check the width of your compost bin from the front and the back and make sure it is square by measuring diagonally from each back corner to the opposing front corner.

Step 6: Building the Second Course
Begin the second course at the corner following the pattern in Layout 2. Adjust the blocks as necessary to ensure that they line up properly.

Step 7: Building the Additional Courses
Continue stacking courses of blocks following Layouts 3-5. Adjusting the blocks as necessary as you stack them up. Each course will step back to give a nice staggard look to the front of the bin.
Step 8: Installing the Cap Blocks
Finish the walls with Wall Caps. You will want to place caps on the outside walls first then complete the back wall. There will be a small gap in the back wall. Two caps will need to be cut to complete the back wall.

Starting at the corner on the first outside wall, place the first cap on so that you have a slight overhang off the back wall. This will ensure that the caps along the back wall line up with the corners. Alternate the direction of each Wall Cap as you move down the outside wall. The caps will end before the end of the wall, leaving a portion of the corner block exposed to continue that staggered look. Repeat this on the second outside wall.

Now you are ready to cap the back wall. Place three caps on the back wall adjusting their placement to ensure an even overhang. You will need to cut two caps to fill in the gap on either end of the back wall. To do this, center the three caps so that there is an equal sized gap on each side of the back wall. Measure the distance of the first gap (from the corner cap to the first cap on the back wall). Mark this distance on the cap to be cut. Using a saw with a masonry blade, cut the cap to the desired dimension. For more information on cutting and splitting block see how to sheet #210. Repeat this process to fill in the gap at the other end of the back wall.

Once the caps are cut, secure all the wall caps in place with a bead of masonry adhesive along both sides of the raised rings and along the sides of each wall cap. Allow this to dry completely before moving on to Step 9.

Step 9: Install the Compost Cover
The next step is to complete the compost bin cover. This cover will keep any wildlife from taking up residence in your compost, while still allowing air to filter though.

Step 10: Assemble Cover Brackets
Use aluminum or galvanized steel angles to attach the cover to the bin. Cut the pieces to size. Use a drill with an masonry bit and masonry screws to attach the angles to the sides of the Wall Caps on each side of the compost bin. Use a minimum of 3 screws for each angle piece. This will create a shelf for the lid to rest on that will make the lid easy to remove when needed.
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**Step 11: Constructing the Compost Cover**
A rodent-resistant bin has a secure top and bottom, and no holes larger than 1/4 inch (6 mm). The most rodent-resistant bins are enclosed in 1/4 inch (6 mm) wire mesh. In this example, we have constructed a less restrictive bin using a hinged wooden frame with chicken wire screening (found at your local hardware or garden supply store).

**Step 12: Build the Lid Frame**
Begin your compost lid by constructing 2 lid frames using the layouts below. Use 2 in. x 3 in. (50 mm x 75 mm) wood studs to construct. One side of each lid frame is designated to be the hinge side. This piece of wood will need to be cut at an angle so the hinges will move properly once assembled (see Figure 1).

**Step 13: Assemble Mesh**
Once the lid frames are assembled and before you hinge them together, stretch the wire mesh over the frame and staple it into place. Attach the hinges to the hinge side of each frame and secure them together.

Your cover is now ready to be set in place. Simply slide the cover on the angle pieces installed earlier and flip the lid down. Now you are ready to fill with composting materials and live green.

**Tools & Materials Needed**

<table>
<thead>
<tr>
<th>Tools</th>
<th>Compost Bin Assembly</th>
<th>Bin Lid Assembly</th>
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<tbody>
<tr>
<td>Square</td>
<td>36 AB York Blocks</td>
<td>4 Wood Studs -</td>
</tr>
<tr>
<td>Shovel</td>
<td>12 AB Dublin Blocks</td>
<td>2 in. x 3 in. x</td>
</tr>
<tr>
<td>Level</td>
<td>20 Corner Blocks</td>
<td>8 ft (50 mm x 75</td>
</tr>
<tr>
<td>Hand Compactor</td>
<td>17 Wall Caps</td>
<td>2.5 mm x 75 mm)</td>
</tr>
<tr>
<td>Measuring Tape</td>
<td>5 - 50 lb (23 kg) Bags Crushed Rock</td>
<td>1 Roll Wire Mesh (Chicken Wire)</td>
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<tr>
<td>Circular Saw - masonry blade</td>
<td>2 Tubes of Masonry Adhesive</td>
<td>Nails or Exterior Deck Screws</td>
</tr>
<tr>
<td>Dead Blow Hammer</td>
<td>3 Aluminum Angle Pieces</td>
<td>(for frame assembly)</td>
</tr>
<tr>
<td>Hammer &amp; Chisel</td>
<td>1.5 in. x 36 in. and 1/8 in. thick</td>
<td>Staple Gun and Staples</td>
</tr>
<tr>
<td>Safety Glasses</td>
<td>(40 mm x 915 mm and 3 mm)</td>
<td>2 Outdoor Hinges</td>
</tr>
<tr>
<td>Dust Mask</td>
<td>9 Concrete Anchors</td>
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</tr>
<tr>
<td>Work Gloves</td>
<td>9 Concrete Screws</td>
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