This is Rodney Bloom. He’s a Master Recycler, Master Composter and all-around compost expert. Rodney loves vermicomposting. He has been doing this for many years. In that time many people have asked how to build the stacking worm bins you see him holding here. This guide will show you how to do just that!

Thanks Rodney!
Tools
You only need a few and simple tools. If you don’t have them see if you can borrow them. There’s no need to buy new ones.

- Saw
- Measuring tape
- Screwdriver
- Heavy Duty Stapler
- Staples
- Tin snips (to cut wire mesh)

Materials
You don’t have to use new lumber - worms aren’t picky. If you can find used stuff, great! Use this guide as a template. If you have some old pallets you want to tear apart, they'll probably work just fine. The adjustment’s you’ll need to make are minor and mostly impact the length of the material.

<table>
<thead>
<tr>
<th>#</th>
<th>What?</th>
<th>What for?</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Wood 1.5” screws</td>
<td>These hold it all together</td>
</tr>
<tr>
<td>2</td>
<td>1x2 cut 14” long</td>
<td>These are used to make the handles on the sides</td>
</tr>
<tr>
<td>4</td>
<td>2x4 cut 5 ½” long</td>
<td>These are used as supports. Green in figure 1 below.</td>
</tr>
<tr>
<td>2</td>
<td>1x6 cut 14” long</td>
<td>These are red in figure 1 below. These make up one side of each worm bin.</td>
</tr>
<tr>
<td>2</td>
<td>1x6 cut 13” long</td>
<td>These are blue in figure 1 below.</td>
</tr>
<tr>
<td>1</td>
<td>¼” machine cloth</td>
<td>Machine cloth is galvanized wire mesh. It’s used here to for the bottom of the worm bin. Using ¼” (the size of the holes) helps the compost material stay on a layer till the worms are done eating. About 14” x 14”</td>
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</tbody>
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Size
The design here will produce a worm bin approximately 14 inches square. There’s nothing special about this number. It’s just that bigger bins start to get really heavy, and Rodney wants to avoid getting a back injury before his 97th birthday.

Many stacking worm bins have three levels. The list of materials below only shows what you need to make ONE level. You can make any number of levels; just plan accordingly. (Hint: If you have friends who dig worms ;) you could make a whole bunch and give them away as gifts.)

Top & Bottom
This guide does not describe a top or bottom. Rodney places his directly on the ground so the leachate runs off with no problem. If you’re not putting these directly on the ground you’ll need some way to take care of this. For the top, a flat piece of plywood about 14” square would work nice, but just about anything will do.
Figure 1: Diagram of a worm bin layer.

Figure 2 & 3: Pictures of a finished worm bin layer.
How to assemble each level in four easy steps

1. Attach two of the 2x4 pieces to one of the 13” 1x6 segments using two screws as depicted in the picture and diagram at right. Repeat.

2. Connect these two U shaped segments to the 14” 1x6 segments with additional screws so that they form a box. The red circles in the picture at the right show where two screws should go in each side.

3. Attach the 14” 1x2 segments to create the handles.

4. Lastly, make sure the machine cloth fits the bottom of the frame. Use a heavy duty stapler to secure the machine cloth to the bottom of the frame by stapling the outer edge to the frame. (Another option if you do not have a heavy duty stapler is to use a hammer and u-shaped tacks available at any hardware store.)