

ing all of the hardwood to strips. You will cut the walls, corners, and stops from these strips.

Figures 5, 6, and 7 detail the three layers. Starting with **Fig. 5**, the 21.5Hz layer, cut the seven walls to the lengths shown. I label each one with the layer frequency and wall length. Do the same for the remaining two layers and keep the walls for each layer separate. Note that one wall of the 42/58.8Hz layer is 24.25" long; cut a short length and glue it to the 24" piece to make the full 24.25".

Make the 29 corners as shown in **Fig. 11** and the four stops as shown in **Fig. 12**. Cut the 6" x 12" sub top from 1/2" particleboard. Refer to **Fig. 12** and cut the divider and divider braces from 1/2" particleboard. You can find felt for the stops at a local craft store. Attach the felt to the stops with a line of white glue around the edge and a dot in the middle, leaving most of the felt glue free. After the glue has dried, trim the edges with a sanding block.

Note, when cutting the walls, to cut seven for each layer. You must install all seven walls in each layer to ensure the integrity of the box. Leaving out a wall—even though that section of tube is not used—will cause the box to be less rigid and subject to resonance effects.

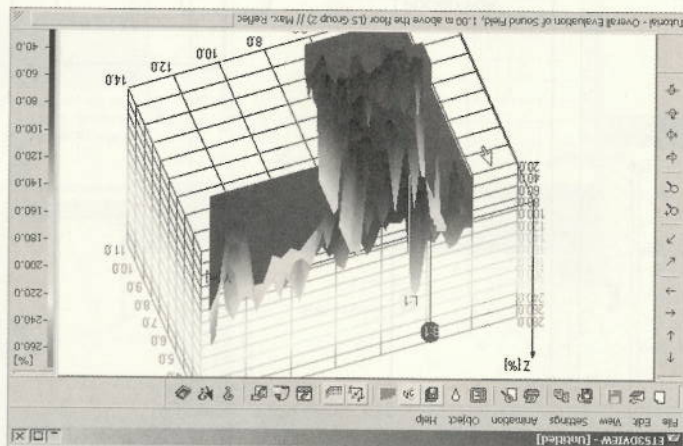
ADHESION

Photo 3 shows the start of the first layer. I generally begin with the 30Hz layer, which starts out on a 1/4" side. Use a fine point magic marker to draw the outline of the walls and label the length, corners, stops, and, in this case, the sub top.

Photo 3 also shows what I built to aid construction: a right-angle jig that I clamp on the wall to position it during gluing and a larger jig consisting of a 30" x 36" sheet of plywood with four uprights affixed to it. The uprights, which are positioned in a right-angle "L" to engage two sides of the core, are about 15" tall and are carefully set to right angles to the base. When adding a separator or the last side to the core you snug the core tightly into the "L" and use the uprights to align the new piece. Use a good grade of polyurethane glue for construction. This glue expands as it sets and will fill any small gaps. Be generous with the glue, using large beads, especially when covering a

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PHOTO 3: Starting the first layer.

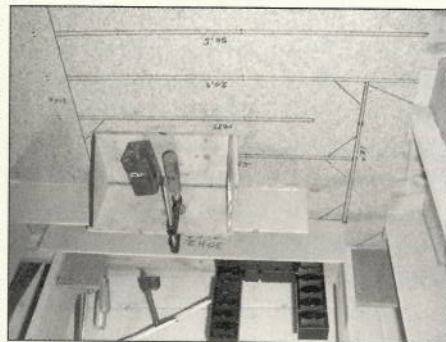


PHOTO 4: 30Hz layer ready for separator.

