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Subject: Journal of a First-time Builder - Pt 1: Assembly

Posted by [GarMan](#) on Tue, 04 Nov 2003 11:46:11 GMT

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If there are no objections, I'd like to start a thread documenting my experience as a first time speaker builder and the 2 Pi Towers. Last Thursday, I went to the Building Box and got a sheet of 1" MDF cut to size for one tower cabinet. The cost of cutting was only \$2 and was very accurate. Absolutely no need to buy or rent (or learn how to use) a table saw if you don't already have one. Since I was using 1" panels, I increased all external dimensions by 3/4" to maintain internal volume (Wayne's plans called for 5/8" board). Why just one cabinet? Guess I was scare to commit to two until I have a good feel for what I'm doing. With the panels leaning in our front hall, it was the first time that it hit me how big these speakers are going to be (see other post "Towers are Hugel!". Even though I had thought of resizing, I still proceeded to assemble the first cabinet over the weekend. Who knows? I might look better once it's put together. Four hours were spent on Sat cutting the holes for the drivers and putting the front, top, and sides together with lots of glue and 5/16" dowels. I would have liked to use biscuits, but I didn't have the tools. With dowels, all you need is a power drill, and a handful of brass plug/spikes to align the holes. The use of dowels made dry fitting a breeze! A suggestion to first time builder: Get more clamps. You can never have too many clamps. Also, a good metal square is extremely helpful. With the 1" panels, dowels, and glue, the box was rock solid. But I still spent 3 hours on Sunday installing bracing (you can never over-brace). In addition to the two sets of cross-brace suggested by Wayne, I also inserted right-angled triangular pieces to brace the side panel to the front and rear baffles. The triangles were cut from the MDF and measured 5"x5"x7". By my calculations, I have about 280 in<sup>3</sup> of bracing in this cabinet, so I'll have to adjust the port size for this. Right now, I have a partially completed cabinet sitting in the corner of our living room. I won't be able to get to it again until the weekend. My wife's nickname for it is "Monster". I keep taunting her about the second cabinet to come. While the cabinet is large, I'm getting used to it and I'm starting to think that it fits the room. Our living room is about 18'x20' with a sloped ceiling from 11' to 15'. However, I'm still toying with the idea of reducing the height by 6".to be continued...